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TOWARD A PSYCHOLOGICAL UNDERSTANDING OF THE EFFECTS OF CHANGES IN GROUP STATUS ON INTERGROUP RELATIONS

A Dissertation Presented

By

KATYA ALEX MIGACHEVA

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2013

Psychology

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TOWARD A PSYCHOLOGICAL UNDERSTANDING OF THE EFFECTS OF CHANGES IN GROUP STATUS ON INTERGROUP RELATIONS

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KATYA ALEX MIGACHEVA

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DEDICATION

To my Mom and Dad,

who deserve my gratitude the most, but expect it the least. To you I devote this and every one of my accomplishments.

***

Любимым маме и папе,

Моим самым близким людям, которые больше всего заслуживают моей благодарности, и меньше всего ее ждут. Вам я посвящаю это и все мои достижения

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ABSTRACT

TOWARD A PSYCHOLOGICAL UNDERSTANDING OF THE EFFECTS OF CHANGES IN GROUP STATUS ON INTERGROUP RELATIONS

MAY 2013

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Societies undergoing drastic transformation are often inundated with intergroup strife, particularly, when the transformation is accompanied by drastic shifts in groups' status (e.g., Bettlehem & Janowitz, 1964). The present dissertation project aimed to begin understanding the effects of such changes in group status on intergroup outcomes, and to identify psychological processes that may underlie these effects. To achieve these goals, two studies examined perceived dimensions of status change (*magnitude, direction,* and *speed*) in relation to outgroup-specific outcomes (*unity* and *threat*) and general diversity-related outcomes (*attitudes toward equity, openness to diversity,* and *ethnocentrism*). Study 1 was conducted with university students in Ukraine, and revealed that, although dimensions of status change did not predict general diversity-related outcomes, direction and speed interacted in predicting outgroup-specific outcomes among participants who perceived small status change; for these participants, perceptions of faster gains were associated with less unity and more threat. Study 2, conducted with an older and more diverse sample of Ukrainian citizens, replicated these patterns, but also found significant relationships between dimensions of status change and general diversity-related

outcomes. Specifically, in addition to predicting less unity and more threat, perceptions of fast small gains also predicted less positive attitudes toward equity, less openness to diversity, and more ethnocentrism. Study 2 also tested threat and relative deprivation as psychological processes that may help explain these relationships. When threat and relative deprivation were included as mediators, fast small gains no longer negatively predicted intergroup outcomes; in fact, in the mediated model, faster gains, both small and large, were associated with more unity, more positive attitudes toward equity, more openness to diversity, and less ethnocentrism. The implications of these findings and avenues for future research are discussed.

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INTRODUCTION

We welcome change and openness; for we believe that freedom and security go together, that the advance of human liberty can only strengthen the cause of world peace. There is one sign the Soviets can make that would be unmistakable, that would advance dramatically the cause of freedom and peace. General Secretary Gorbachev, if you seek peace, if you seek prosperity for the Soviet Union and Eastern Europe, if you seek liberalization, come here to this gate. Mr. Gorbachev, open this gate. Mr. Gorbachev, tear down this wall!

(Ronald Reagan, June 12th, 1987)

Over twenty years ago, mesmerized, the Western world watched as the people of Eastern Europe stepped – or, rather – jumped into a whirlpool of change. However, over two decades after the fall of the Berlin wall, the raise of the Iron Curtain, and the end of the Red Scare, many of these countries have yet to see the prosperity, peace and security professed by Reagan. In fact, societies undergoing drastic transformation are often inundated with group violence (Staub, 1997), xenophobia (Hanson & Kopstein, 1997), and ethnocentrism (Hagendoorn, Linssen, & Tumanov, 2001), particularly, when the transformation is accompanied by drastic shifts in groups' status within the societal hierarchy (Bettlehem & Janowitz, 1964; Staub, 2008). While societal change, framed as an outcome, has received some attention in social psychology (e.g., Becker, 2012; Klandermans, 1997; Tajfel & Turner, 1979), social psychological research has remained virtually silent about how intergroup relations are affected by societal change (see Moghaddam, 2000; Moscovici, 1972). The goal of this dissertation project was to narrow this gap in social psychological literature, and to shed light on the psychological processes that shape intergroup relations in the aftermath of societal transformation. In doing so, I ground my research in theoretical discourse and early empirical research on

societal transformation and status change, as well as refer to theories of threat and relative deprivation as frameworks for understanding intergroup relations after societal change.

Living through Societal Transformation

Drastic societal transformation constitutes a change in societal structures that is both dramatic and sudden (de la Sablonniere, Taylor, Perozzo, & Sadykova, 2009a). Societal transformation varies in its directionality (positive or negative change; de la Sablonniere, Tougas, & Lortie-Lussier, 2009b) and can be characterized by its size and speed (Bettlehem & Janowitz, 1964; Hobfoll & Lilly, 1993; de la Sablonnière, et al. 2009a). The scarce social psychological discourse on societal transformation suggests that drastic societal transitions, resulting from upheaval in political and economic ideologies, bring about uncertainty and fluidity in multiple aspects of social and personal life (Bettelheim & Janowitz, 1964; Parsons, 1964; Rogers, 2003). The norms, behaviors, and attitudes fostered for much of people's lives are interrupted and questioned; what was unspeakable before becomes acceptable and vice versa; the idols of the past fall in disgrace as former social and ideological pariahs rise to power (e.g., Pearce & Frese, 2000; Stevens, 2002). As the speed of macro-level change (e.g., laws, economic and political systems) is considerably faster than the speed of psychological change (Moghaddam & Crystal, 2000; Moghaddam & Lvina, 2002), drastic transformations, whether positive or negative, can distress and destabilize the lives of people who experience them (e.g., Hobfoll & Lilly, 1993), diminish their subjective well-being, and negatively impact their physical (Siegrist, 2000) and mental health (Shteyn et al., 2003).

Recent research has also demonstrated that drastic and rapid societal changes

have consequences beyond outcomes for the individual. For example, individuals' rapport with and esteem of their ingroup can also be affected (e.g., de la Sablonniere et al., 2009a). However, we currently know little about how relations between members of different groups are affected by drastic societal transformation; thus, the present research aims to enhance our understanding of the psychological effects of changes in group status – as an outgrowth of broader societal transformation – on intergroup outcomes.

Group Status and Intergroup Relations

In general, *status* refers to the stratification of groups in a societal hierarchy, in which differences are maintained in a manner that sustains social inequality (Berger, Rosenholtz, & Zelditch, 1980; cited from Nadler, Harpaz-Gorodeisky, & Ben-David, 2009). The position of groups in the societal hierarchy, as well as how socio-structural variables (e.g., status stability) impact intergroup outcomes, has received ample attention in social psychology (e.g., Bettencourt, Charlton, Dorr, & Hume, 2001; Sachdev & Bourhis, 1987; Scheepers & Ellemers, 2005; Tajfel & Turner, 1979). However, the bulk of this research focuses on groups' *static* status positions (e.g., subordinate position of racial minority groups, privileged position of Whites in the United States). This research has not considered how and when these status positions were obtained, or the psychological experiences of group members as they adjust to newly achieved status positions. It seems, however, that the experiences of members of groups that have recently acquired a "*high*" or "*low*" status due to major societal transformation should not be equated with the experiences of members of those groups that have been in a long-standing *"high" or "low"* status position. People who have been socialized as members of a lower status group may not immediately adopt the mindset of a high status group

when faced with a rapid upward shift in group status. Similarly, people whose group has lost status as a result of a societal transformation might not easily adapt to their new position in society (see also Moghaddam & Lvina, 2002). Thus, through the investigation of *changes* in group status, we can potentially learn a great deal about how people form intergroup relations after societal transformation.

Status *Change* and Intergroup Relations

Some research contends that following societal transformation, comparing a group's present situation to its situation in the past allows people to reposition and shape their group's role in the new social environment (Brown & Middendorf, 1996). For instance, Pettigrew and colleagues (Pettigrew & Riley, 1971; Vanneman & Pettigrew, 1972) showed that perceptions that the ingroup lost status in comparison to the past explained working class White Americans' prejudice and political support for anti-Black candidates in the United States. As such, people's evaluations of changes in their group's status may impact their responses to intergroup relations.

The importance of status change for intergroup outcomes was first discussed by Bettelheim and Janowitz (1950), and elaborated upon by these authors in the wake of the U.S. civil rights movement, when social scientists were particularly concerned about reactions to status shifts between Whites and Blacks (Bettelheim & Janowitz, 1964). These authors argued that it was as important to know how much and in which ways a person's status has changed recently, as it was to know their current position. Indeed, early empirical work showed that people who had experienced recent drastic change in their socioeconomic status held more negative stereotypes about other groups, aspired for greater social distance from them, and were generally more hostile toward members of

other groups as compared to people who did not undergo such change (Silberstein & Seeman, 1957). Interestingly, both downward shifts (i.e., status loss; Pettigrew, 1959) and upward shifts (i.e., status gain; Curtis, 1958) in an individual's status predicted negative attitudes toward members of other groups.

Put together, these pieces of research indicate that drastic shifts in status, whether positive or negative, may lead to negative intergroup outcomes. This early work also suggests that different aspects of status change should be considered in concert to understand their impact on intergroup relations after societal transformation. In particular, the research points toward two aspects of status change that can be important for intergroup outcomes: (1) *magnitude* of status change (i.e., *how much did the status change?*; e.g., Silberman & Seeman, 1957) and (2) *direction* of status change (i.e., *did the change result in status gain or status loss?*; Curtis, 1958; Pettigrew, 1959). More recent scholarship on social change also adds *speed* as an additional characteristic of change (i.e., *how fast did the change occur?*; Beaton, Tougas, & Jolly, 1996; de la Sablonniere et al., 2009b).

Still, in the decades since Bettelheim and Janowitz' (1950) work on this topic, social psychology has added little knowledge to the link between status shift and intergroup outcomes. Furthermore, this early research investigated how shifts in individuals' status affected personal outcomes, whereas social psychological literature insists that group-level phenomena have a stronger bearing on intergroup outcomes than individual-level phenomena (e.g., Walker & Pettigrew, 1984). Thus, the current dissertation project builds upon prior work by moving beyond individuals' perceptions of changes in their *personal* status, and exploring how perceptions of changes in *group*

status affect intergroup outcomes.

Thus, in what follows, I refer to status change as the perceived change in one's group's status, characterized by its magnitude, direction and speed. Expanding upon earlier findings, I propose that drastic (i.e., large and fast) changes in group status should lead to negative intergroup outcomes; consistent with findings by Curtis (1958) and Pettigrew (1959), I also propose that this link will occur regardless of whether group members experience drastic status gain or drastic status loss. Furthermore, this project seeks to identify the psychological processes that might underlie the relationship between status change and intergroup outcomes. Accordingly, the first part of the dissertation (Study 1) focuses on whether and how different aspects of status change predict intergroup outcomes, and the second part of the dissertation begins to examine the mechanisms that underlie these links (Study 2).

Cultural and Historical Context

The present research was conducted in Ukraine – a former Soviet republic that experienced drastic societal transformation and is now an independent democratic state. The coup of 1991 brought a rapid and rather unexpected end to more than 70 years of the Soviet regime. Within days, the ideological, economic and political systems collapsed and hundreds of millions were left to make sense of their national identity (Minahan, 2004). An era of uncertainty began: while people knew which system they wanted to abandon, they were not quite sure about what they wanted instead (e.g., Poppe, 2001). Disintegration of the Soviet Union set back its past ideology of "equality and brotherhood of peoples," calling instead for differentiation, self-determination, social distance, and renunciation of former ties (Kolstoe, 1995). Before the disintegration, social equality – *in*

theory – entailed comparable access to material goods, similar levels of possession of such goods, and equal social esteem given to people of different occupations and nationalities. Notwithstanding the system's failure to achieve such broad-scale equality, the general population was not socialized to think of their ethnic or national group as being of higher or lower status relative to others (Koltsoe, 1995).

However, with the disintegration of the Soviet Union, national groups have acquired new levels of power, economic possessions, and social esteem; previously subordinate nationalities became dominant majorities in multiethnic states. Correspondingly, new norms for intergroup relations have emerged. For example, the titular nations have sought affirmation of their groups' dominant position and exclusive power over cultural institutions, economy, and social services (Hagendoorn, et al., 2001; Tishkov, 1994), while Russians have struggled with their new status as failed rulers and as the unpopular minority within the titular states (Brubaker, 1996).

Ukraine is one example of a titular nation, where the disintegration of the Soviet Union precipitated changes in the status of ethnic Ukrainians and ethnic Russians. Of the former Soviet republics, Ukraine's population of the Russian minority is the largest, with Russians constituting 17 percent of Ukraine's total population (reduced from 22% in Soviet Union; Ukrainian Census 1989; 2001). The status of Russians in Ukraine – at least in terms of political power and social esteem – is believed to have changed greatly and negatively due to the disintegration of the Soviet Union (Ryzanova & Andreychenko, 2008), all the while the political and social status of Ukrainians has increased, making them the dominant group in Ukrainian society. Tensions between these groups followed: Ukrainians resent that first imperial, and then Soviet Russia has been dominating Ukraine

for centuries and feel that Ukrainian culture has been sacrificed in service to Russians' imperialistic aims (Hangendoorn et al., 2001). Although a big percentage of Ukrainian citizens, regardless of their ethnicity, still use Russian as their primary language (Oxford Business Group, 2007), many Ukrainians see that Russian language and cultural dependence on Russia have been artificially implanted in Ukraine and continue to work to clear Ukraine of its influence, considering Russian-speaking Ukrainians an "historical mistake" (Gudkov, 2006; Minahan, 2004; Ryzanova & Andreychenko, 2008). Ethnic Russians in Ukraine, on the other hand, struggle to cope with their new, less powerful position, and tend to view ethnic Ukrainians as less capable, less hardworking, and less intelligent (Hangendoorn et al., 2001). Given all these phenomena, Ukraine seems to be a particularly fitting context to examine consequences of group status change for intergroup relations after societal transformation.

CHAPTER 2

STUDY 1

Thus, Study 1 began exploring the links between dimensions of group status change and intergroup outcomes in the Ukrainian context. I expected that examining the three main dimensions of status change (magnitude, direction, and speed) simultaneously would yield better understanding of their association with intergroup outcomes after societal transformation. More specifically, based on early theorizing and empirical findings (e.g., Bettelheim & Janowitz, 1964; Curtis, 1958; Pettigrew, 1959), I predicted that changes in group status that are perceived to be large and fast would be associated with negative intergroup outcomes, regardless of whether such changes were perceived to be positive or negative.

Method

Study Overview and Design

Study 1 followed a mixed-model design (experimental and correlational), in which the magnitude of status change (Small/Large) was a manipulated independent variable, and the direction and speed of status change were measured predictors.

Participants and Procedure

One hundred and thirty two students (83 women/46 men/4 did not report their sex; *M* (age) = 19.11, *SD* = 1.42) attending two major Universities in Kyiv, Ukraine, participated in this study. All of the participants reported their ethnicity as Ukrainian. At the beginning of a class period, two experimenters, Russian-speaking and Ukrainian-speaking, distributed surveys to participants, who were randomly assigned to one of the experimental conditions.

All participants were given a choice of whether to fill out the survey in Ukrainian or in Russian; 51 participants chose to fill out the surveys in Russian, while 84 participants chose to fill out the survey in Ukrainian. The survey instrument was translated and back-translated from English into Russian, and from Russian into Ukrainian.

The front page of each survey contained instructions in the language of the survey. As the official academic language of Ukraine is Ukrainian, the verbal instructions were given in Ukrainian. Thus, the Ukrainian speaking experimenter explained that the purpose of the survey was to learn how contemporary youth viewed changes in Ukrainian society, precipitated by the disintegration of the Soviet Union. The experimenter further explained that we were particularly interested in their experiences with members of different groups living in Ukraine. Both verbal and written instructions emphasized the importance of providing honest opinions, and noted that there were no right or wrong answers to the questions on the survey. To protect participants' privacy, all participants sat either at individual desks, or at the opposing edges of a desk.

Experimental manipulation

As multiple aspects contribute to a group's status in any given society (e.g., Ellis, 1993), group status was conceptualized as a combination of 1) a group's *economic* standing 2) the *social esteem* it enjoys, and 3) its access to *political power*. Following the instructions page, participants were presented with a fake news flyer (see Appendix A). Entitled "Ukraine Today", the flyer was dated February 2011, and indicated 'www.statusnews.com' as its wireless domain. Below this initial information, participants read a short paragraph, entitled "Legacy of the USSR: The Present and the Past." All of

the participants read that the disintegration of the Soviet Union precipitated certain changes for ethnic Ukrainians in Ukraine. Participants in the small change condition read that the world-renowned Sociometer scale considered these changes small in size. Participants in the large change condition read the world-renowned Sociometer scale considered these changes big in size. To further strengthen the manipulation, participants read that the results of the all-Ukrainian poll of the ethnic Ukrainian population supported the findings of the Sociometer. Participants in the small change condition were led to believe that most ethnic Ukrainians thought that their economic, social, and political status as a group has changed by 4-7 percent. Participants in the large change condition were led to believe that most ethnic Ukrainians thought that their economic, social, and political status as a group has changed by 37-45 percent.

Measures

The survey instrument contained items to assess the effectiveness of the manipulation (i.e., *manipulation check*), items to measure additional characteristics of status change (i.e., *direction and speed*), and items to assess intergroup outcomes. At the end of the questionnaire, participants responded to several demographic questions. The full list of items is presented in Appendix B.

Manipulation check

Manipulation check was presented immediately after the page with a flyer; on a scale from 0 (no change at all) to 6 (very large change), all participants reported how much the overall socio-economic and political status of ethnic Ukrainians has changed with the disintegration of the Soviet Union, according to the flyer they just read.

Status change

In addition to manipulating the magnitude of status change (**Magnitude**), the direction of status change (**Direction**) and the speed of status change (**Speed**) were measured.[1] Using items adapted from de la Sablonniere et al (2009b), for each of the three main dimensions of status change (economic, social esteem, and political power), participants reported their evaluation of the nature of status change (e.g., *In your view*, *what was the nature of the change in [ethnic Ukrainians'/ethnic Russians'] political power;* –3 (status loss) to +3 (status gain;), and how fast they thought this change occurred (*How fast did this change occur*; 0 – very slowly to 6 – very fast). Scores on the three items for Direction were averaged to create a composite measure of direction of status change (α = .723). Scores on the three items for Speed (α = .620) were also averaged to create a composite measure of speed of status change. Both Direction and Speed were used as non-experimental predictors in the subsequent analyses.

Intergroup outcomes

Two types of intergroup outcomes were assessed in this study: outcomes in relation to the specific outgroup (i.e., *unity* and *threat* in relation to ethnic Russians in Ukraine) and outcomes in relation to diversity in general (i.e., *general attitudes toward equity*, *openness to diversity*, *ethnocentrism*). Unless noted otherwise, participants gave their ratings on Likert-type scales ranging from -3 (strongly disagree) to +3 (strongly agree; see Appendix B).

Participants' perceptions of ***Unity*** were measured with two items (adapted from Golovakha, 2006; e.g., *Ethnic Russians and ethnic Ukrainians in Ukraine are one people*; α = .770). Participants' perceptions of ***Threat*** posed by Russians were measured with 6

items (adapted from Golovakha, 2006; Pettigrew & Meertens, 1995; e.g., *The Ukrainian government pays too much attention to its Russian citizens at the expense of the Ukrainian citizens*; $\alpha = .801$). Three items were designated to measure ***Attitudes toward Equity*** (adapted from Postmes & Smith, 2009; e.g., *Regardless of their ethnicity, all people living in Ukraine should have equal rights*; $\alpha = .772$). Additionally, three items assessed ***Openness to Diversity*** (adapted from Pettigrew & Meertens, 1995; e.g., *I seek opportunities to interact with people from other cultures*; $\alpha = .720$), and three items assessed ***Ethnocentrism*** (adapted from Pettigrew & Meertens, 1995; e.g., *I am only comfortable interacting with members of my own ethnic group*; $\alpha = .881$). As shown in Table 1, the correlations between the outcome variables ranged from weak (e.g., Openness–Threat, $r = .03$, $p > .05$) to rather strong (e.g., Unity–Threat, $r = –.54$, $p \leq .001$).

Results

Analytic Approach

In addition to the descriptive assessment of all variables, two one-way analyses of variance (ANOVA) were conducted to (a) check the effectiveness of manipulation, and (b) to test whether experimental manipulation of magnitude had an effect on measured predictors – direction and speed. To test the main hypotheses, separate multiple regression analyses used Magnitude, Direction, and Speed, all two-way interactions between these variables, as well as the three-way interaction between them, as predictors for each of the intergroup outcomes. To avoid multicollinearity, all continuous predictors were centered prior to these analyses (Cohen, Cohen, West, & Aiken, 2003).

Preliminary Analyses

As shown in Table 2, preliminary descriptive analyses demonstrated that, on average, participants perceived the status change of their group to be somewhat positive ($M = .57$, $SD = 1.32$), and their ratings of the speed of change fell in the middle of the scale ($M = 2.91$, $SD = 1.00$). Further, on average, participants disagreed slightly that Ukrainians and Russians are one people (*unity*), appeared to be somewhat threatened by the outgroup (*threat*), somewhat supportive of equality for all (*attitudes toward equity*), slightly open to diversity (*openness to diversity*), and not too ethnocentric (*ethnocentrism*; see Table 2).

One-way analysis of variance of the manipulation check revealed that participants in the small change condition reported that the status change discussed in the information flyer was smaller ($M = 3.35$, $SD = 1.36$), than participants in the large change condition ($M = 3.93$, $SD = 1.22$), $F\ (1, 130) = 6.66$, $p \leq .05$.

Importantly, a one-way ANOVA revealed that the experimental manipulation of Magnitude did not affect the measured predictor variables. Specifically, participants reported similar perceptions of the direction of status change, regardless of experimental condition ($M_{\text{small change}} = .63$, $SD = 1.12$; $M_{\text{large change}} = .51$, $SD = 1.32$), $F\ (1, 133) = .295$, $p > .05$. Participants also gave similar ratings of speed of change regardless of experimental condition ($M_{\text{small change}} = 2.79$, $SD = .87$; $M_{\text{large change}} = 3.01$, $SD = 1.10$), $F\ (1, 132) = 1.702$, $p > .05$.

Regression Analyses

Unity

As shown in Table 3, the analysis of unity yielded a main effect of Direction: the more positive participants perceived the status change to be, the greater unity they reported (B = .45, SE = .20), t (129) = 2.23, $p \leq .05$. However, this effect was qualified by a significant Direction x Speed interaction (B = –.66, SE = .26), t (129) = –2.55, $p \leq .05$, and a significant three-way Magnitude x Direction x Speed interaction (B = .59, SE = .29), t (129) = 2.06, $p \leq .05$. Deconstructing these interactions, the two-way Direction x Speed interaction did not significantly predict unity among participants in the large change condition (B = –.06, SE = .13), t (65) = –.49, $p > .05$, but did predict unity among participants in the small change condition (B = –.66, SE = .26), t (58) = –2.51, $p \leq .05$. Simple slopes analyses showed that for participants in the small change condition, faster gain was associated with less unity (B = –.95, SE = .35), t (58) = –2.68, $p \leq .01$, while speed and loss did not interact in predicting unity (B = .13, SE = .37), t (58) = .35, $p >$ .05 (see *Figure 1*).

Threat

As summarized in Table 3, the analysis of threat also yielded a significant main effect of Direction (B = –.32, SE = .13), t (129) = –2.45, $p \leq .05$: more positive status change was associated with less threat. However, this effect was qualified by a significant Direction x Speed interaction (B = .36, SE = .16), t (129) = 2.28, $p \leq .05$, and a significant three-way Magnitude x Direction x Speed interaction (B = –.49, SE = .18), t (129) = –2.66, $p \leq .01$. Deconstructing these interactions, the Direction x Speed interaction was not significant in the large status change condition (B = –.13, SE = .09), t (65) = –.21, $p > .05$,

but it was significant for participants in the small status change condition (B = .36, SE = .16), t (58) = 2.21, $p \leq .05$. Simple slopes analyses revealed that for participants in the small change condition, faster gain was associated with more threat (B = .60, SE = .25), t (58) = 2.44, $p \leq .01$, while speed and loss did not significantly interact in predicting threat (B = –.22, SE = .26), t (58) = –0.84, $p > .05$ (see *Figure 2*).

Further regression analyses yielded no significant links between the status dimensions and the remaining intergroup outcomes (see Table 4).

Discussion

The main objectives of Study 1 were to investigate whether perceived dimensions of status change related to intergroup outcomes, and to take the first look at how these dimensions interact in predicting these outcomes. Grounding my hypotheses in early theorizing and empirical findings (e.g., Albert & Sabini, 1974; Bettelheim & Janowitz, 1964; Curtis, 1958; Pettigrew, 1959), I expected that whether positive or negative, a change in status that is large and fast would precipitate negative intergroup outcomes.

In line with the overall expectations, Study 1 showed that dimensions of status change contribute to predicting some intergroup outcomes, and that examining different dimensions of status change together is crucial. Specifically, while more positive status changes were generally associated with more unity and less threat, interactions revealed that speed and magnitude of change were especially important for those who perceived status gain. Fast gains were associated with more intergroup threat and less unity, yet, contrary to predictions, this was particularly the case for those participants who perceived *small* status change.

Fast changes were previously linked to feelings of dissatisfaction and pessimism about the group's future (Albert, 1977; Albert & Sabini, 1974; de la Sablonniere et al., 2010; Tougas et al., 1995); but the hazard of *small* fast gains in particular is puzzling. That fast small gain predicted more threat might suggest that when gains are perceived to be small and fast, the intergroup situation is viewed as particularly vulnerable. It is possible that when small gains are acquired quickly, it is still unclear whether the outgroup may attempt to challenge the ingroup's ascent (Rogers, 2003; Stevens, 2002; Tougas et al., 1995), and whether sustaining achieved gains is plausible.

Furthermore, Study 1 revealed a strong negative relationship between threat and unity. Similar negative effects of threat are well documented in a broad array of studies, spanning several decades and contexts (Aberson & Gaffney, 2008; Bizman & Yinon, 2001; Kinder & Sears, 1981; Stephan & Stephan, 2000), and in relation to a variety of intergroup outcomes – unity, ethnocentrism, and support for equity among them (Cadinu & Reggiory, 2002; Grant & Brown, 1995; Hornsey & Hogg, 2000; Riek, Mania, & Gaertner, 2006). As such, it may well be that threat is both a consequence of status change, as well as a predictor of negative intergroup outcomes. Consistent with this view, threat is often viewed as a mediator between its antecedents and intergroup outcomes (see Stephan & Stephan, 2000; Stephan et al., 2002), although it has yet to be investigated in its relation to status change. Supplementary analyses from Study 1 show trends to suggest that threat may indeed mediate the relationship between status dimensions and other outcomes relevant to the outgroup.[2] Study 2 will conduct a more formal test of threat as a potential mediator of relationships between dimensions of status change and other intergroup outcomes.

Study 1 also revealed that none of the general diversity-related outcomes (i.e., attitudes toward equity, openness to diversity, ethnocentrism) showed any significant associations with the three status change dimensions and their interactions. Possibly, these links failed to emerge because of the younger age of participants in this study. For the 17-22 year old university students who did not live through the actual transformation, such general issues as, for instance, openness to diversity, or attitudes toward equity, may have more to do with the present-day status quo rather than with the remnants of their parents' past (Minahan, 2004). At the same time, relationships between the status change dimensions and threat and unity may have emerged because the specific issue of Russians in Ukraine is still very much discussed through the prism of the Soviet past (Golovakha, 2006; Minkevich, 2002; Ryzanova & Andreychenko, 2008). It is possible, however, that for people who were old enough to experience Ukrainian society both before and after the Soviet Union, perceptions of status change may be more relevant for how they view diversity today. To test this assumption, Study 2 will include participants of older age – those who at least reached high school by the time the Soviet system collapsed.

Finally, since only ethnic Ukrainian participants were recruited for this study, Study 1 did not address the question of whether dimensions of status change predict intergroup outcomes *in addition* to what can be explained by the groups' current status positions. Yet, traditionally, social psychological research has examined intergroup outcomes in relation to groups' current positions within the societal hierarchy (e.g., Bettencourt et al., 2001; Sachdev & Bourhis, 1987; Scheepers & Ellemers, 2005; Tajfel & Turner, 1979). This research shows, for example, that members of high status groups are more likely to feel threatened by an outgroup (e.g., Blalock, 1957; Kimmel, 2004), to

deny an outgroup parity (Sachdev & Bourhis, 1991), to vote against policies promoting equity (Kluegel & Bobo, 2003), to express prejudice (Quillian, 1995), and to exhibit ingroup bias (Lorenzi-Cioldi, Eagly, & Stewart, 1995), as compared to members of low status groups. Nonetheless, other studies report the opposite patterns (e.g., Brauer, 2001; Grant & Brown, 1995; Judd, Park, Ryan, Brauer, & Kraus, 1995). One way or another, this research suggests that group current status position should not be overlooked as an important sociostructural factor that contributes to shaping intergroup relations.

However, a recent large-scale study (Kunovich, 2004) revealed that group status tended to be a weaker predictor of threat and intergroup attitudes among participants from Eastern European countries as compared to participants from Western European countries. It is possible, that in Eastern European countries, most of which have gone through or are still undergoing societal transformation, an outgroup is evaluated more through the prism of the recent changes that occurred in group status, rather than through the unclear and uncertain present status positions (e.g., Hobfol & Lilly, 1993). With this possibility in mind, Study 2 will recruit both ethnic Ukrainian and ethnic Russian citizens of Ukraine, who are considered to belong to high status and low status groups, respectively (Tishkov, 1997; Golovakha, 2006), will examine the relationships between group status and intergroup outcomes, and will test whether dimensions of status change predict intergroup outcomes in addition to what can be explained by the groups' current status positions.

To summarize, findings from Study 1 supported the idea that all three dimensions of status change – magnitude, direction, and speed – should be considered to better understand intergroup relations following societal transformation, and that *fast small*

gains might be particularly damaging for intergroup outcomes. Study 2 will build upon and extend these findings by (1) replicating the links between dimensions of status change and outgroup-specific outcomes that emerged in Study 1, (2) examining whether the relationships between dimensions of status change and general diversity-related outcomes will emerge when tested with older participants, (3) investigating threat as a possible mediator between the dimensions of status change and intergroup outcomes, and (4) testing these relationships while controlling for the groups' current status positions. In addition, Study 2 will incorporate themes from the research literature on relative deprivation, and will consider relative deprivation as another psychological process that may link dimensions of status change to intergroup outcomes.

CHAPTER 3

INTERGROUP COMPARISONS AFTER SOCIETAL TRANSFORMATION: RELATIVE DEPRIVATION FRAMEWORK

As group members typically appraise their group status positions by comparisons with relevant outgroups (Tajfel & Turner, 1979), perspectives on relative deprivation (Crosby, 1976; Gurr, 1970; Runciman, 1966; Stouffer, Suchman, DeVinney, Star, & Williams, 1949; Walker & Smith, 2001) seem particularly relevant to the current investigation. A major assumption of this work is that an individual's or group's satisfaction with their position is not necessarily related to their objective circumstances but, rather, to their subjective evaluations of their position relative to other persons or groups (Dambrun, Taylor, McDonald, Crush, & Meod, 2006). Relative deprivation arises out of "frustrated wants and violated entitlements" (Crosby, 1982), and is a highly subjective experience. That is, while a group's objective status may have improved, group members might still subjectively view their position as disadvantaged or their progress toward improved status as stagnant (Eibach & Ehrlinger, 2006).

Two general types of relative deprivation are discussed in the literature: personal and group relative deprivation (Runciman, 1966). As Walker and Pettigrew (1984) have noted, personal relative deprivation involves only intra- and inter-individual comparisons and therefore cannot adequately explain intergroup phenomena (see also Grant & Brown, 1995; Pettigrew, Christ, Wagner, Meerten, van Dick, & Zick, 2008). For example, Whites' opposition to busing was related to perceptions that other groups were doing better than their own group, rather than to feelings of personal deprivation (Useem, 1980). Several studies since then (e.g., Pettigrew & Meertens, 1995; Pettigrew et al.,

2008; Smith, Pettigrew, Pippin, & Bialosiewisz, 2012) found that group-level deprivation had significantly larger effects on intergroup outcomes than personal deprivation. Since the primary interest of my work lies in intergroup outcomes, I will focus on *group relative deprivation* and use this term interchangeably with the more general term, *relative deprivation*.

Relative Deprivation and Intergroup Outcomes

To date, only a few studies tied relative deprivation to intergroup outcomes, showing that perceptions of ingroup disadvantage can generate feelings of anger and dissatisfaction about this disadvantage, which motivate intergroup hostility, greater levels of prejudice (Pettigrew et al., 2008), and extreme right-wing political attitudes (Grant & Brown, 1995). The relationships between the experience of relative deprivation and intergroup outcomes have been empirically studied and supported in the United States (Vanneman & Perrigrew, 1972), Western Europe (Dambrun & Guimond, 2001; Pettigrew et al., 2008), India (Tripathi & Strivasltava, 1981), and South Africa (Appelgryn & Nieuwoudt, 1988).

Though relative deprivation has been researched for decades, only a few studies have examined relative deprivation in the context of societal transformation (de la Sablonniere et al., 2009a, b; Dambrun et al., 2006; Duckitt & Mphuthing, 2002). However, the experience of relative deprivation may be essential for interpreting the effects of societal change in general, and for understanding why small fast gains are associated with negative intergroup outcomes, in particular. For example, in his analysis of race relations in the United States, Pettigrew (1971) noted that middle-class African Americans, who have transitioned from poverty to relative comfort (i.e., status change),

were particularly active in addressing injustices of the society at the time. Pettigrew argued that this transition from "poor to less poor" allowed for new social comparisons to advantaged Whites, thereby precipitating feelings of relative deprivation and intergroup hostility. More recent research resonates with these findings (e.g., Eibach & Ehrlinger, 2006), and suggests that status gains achieved by African Americans can make comparisons with Whites more salient, and correspondingly, the disadvantage of their current position more obvious.

I further argue that in applying the framework of relative deprivation to the study of societal transformation, intergroup comparisons grounded both in the present and in the past should be considered. I therefore introduce a construct of *retrospective* relative deprivation, and define it as people's subjective view of how their ingroup compared to a relevant outgroup in the past. I further propose that such retrospective assessments are essential for understanding intergroup outcomes after drastic societal change.

Retrospective Relative Deprivation

One reason why the link between relative deprivation and intergroup outcomes has been rarely explored in contexts of societal transformation could be the challenge of specifying a standard for comparison due to the fluid, uncertain, and de-stabilizing nature of societal change (Albert & Sabini, 1974; Walker & Pettigrew, 1984). It has been proposed, however, that in times of rapid change, people might be inclined to refer to the more defined past, rather than to the uncertain and unclear present (Albert, 1977; Brown & Middendorf, 1996; Mummendey, Mielke, Wenzel, & Kanning, 1992). Narratives of the group's collective experience in the past can shape people's perceptions of, and emotions toward one's own and other groups (see Rime, 1997). People rely on these

narratives to tell them who they are, where they came from and where they should be going, as well as to help them define relations with other groups (Liu & Hilton, 2005). Indeed, even if the present-day situation is perceived to have improved, the injustices of the past are not forgotten and are still very much in the present (Ross & Wilson, 2002; Cairns, Tam, Hewstone, & Niens, 2005); these past injustices and the affective responses they arouse play a great role in shaping present-day intergroup attitudes and behaviors (Wohl & Brascombe, 2009).

Importantly, status change may also influence how the past is viewed. For example, the perceptions of status gain may create an "elevation point," from which previously low-status group members can now recognize and evaluate their past disadvantage to the full extent; such a new view of the past may, in turn, intensify feelings of resentment toward those who are blamed for it (Pettigrew, 1971). That perceptions of past injustices might be both impacted by status change (Pettigrew, 1971), as well as predict intergroup outcomes (Wohl & Brascombe, 2009; Ross & Wilson, 2002), suggests that retrospective relative deprivation may potentially be another mediator between status change dimensions and intergroup outcomes.

Some inconsistencies in the empirical evidence for the link between relative deprivation and intergroup outcomes point to the need for identifying additional factors that may impact intergroup relations in times of change; I argue that retrospective relative deprivation may be one of them. Studies using real groups in naturalistic settings generally find significant negative relationships between relative deprivation and intergroup outcomes (e.g., Pettigrew et al., 2008; Dambrun et al., 2006), yet a puzzling finding has emerged when this relationship is assessed in the context of societal change.

In the context of democratic elections in South Africa, relative deprivation measured before and after this societal change only weakly predicted intergroup attitudes after the transformation (Duckitt & Mphuthing, 2002). Even though Black South Africans perceived considerably less relative deprivation after the election than before the election, their intergroup attitudes remained unchanged; that is, a decrease in their reports of relative deprivation was not accompanied by a decrease in negative intergroup attitudes (see also Kornegay, 2005).

This interesting finding suggests that measuring present-day perceptions of relative deprivation, or even accounting for relative deprivation measured before societal change, may not be sufficient to predict intergroup outcomes after societal transformation. It is possible that for Black South Africans, who experienced status gain due to the ANC's victory in the elections, perceptions of *retrospective* relative deprivation took precedence over the perceptions of *present-day* relative deprivation in explaining intergroup attitudes after the democratic elections. Study 2 empirically tests the proposition that, along with the perceptions of threat and present-day deprivation, retrospective relative deprivation may be another psychological process connecting dimensions of status gain with intergroup outcomes.

CHAPTER 4

STUDY 2

Thus, Study 2 pursued several goals. First, Study 2 aimed to replicate the relationships that emerged between dimensions of status change and outgroup-specific outcomes (i.e, *unity and threat*). Secondly, Study 2 tested the relationships between dimensions of status change and general diversity-related outcomes (i.e., *general attitudes toward equity, openness to diversity, ethnocentrism*) with a larger and older sample of Ukrainian citizens – those, who grew up in the Soviet Union and experienced the transformation firsthand. Third, Study 2 tested threat, present-day relative deprivation, and retrospective relative deprivation as possible psychological mechanisms – mediators – underlying the relationships between dimensions of status change and intergroup outcomes. Finally, by including both ethnic Ukrainians and ethnic Russians, Study 2 examined the relationships between the dimensions of status change and intergroup outcomes while controlling for participants' current group status in the Ukrainian society.

Specifically, building upon findings in Study 1, I expected to find a significant three-way interaction between Magnitude, Direction, and Speed in predicting unity and threat: (H1) faster gains, particularly when estimated as small, would be associated with less unity and more threat. Further, I expected that among older participants recruited for Study 2, a similar relationship would emerge between the dimensions of status change and general diversity-related outcomes: (H2) faster gains, particularly when estimated to be small, would be associated with less positive attitudes toward equity, less openness to diversity, and more ethnocentrism. Additionally, I hypothesized that (H3) threat, present-

day relative deprivation, and retrospective relative deprivation would mediate the relationship between fast small gains and intergroup outcomes. To this end, I expected that (H3a) fast gains, particularly when estimated to be small, would predict more threat, and more present-day and retrospective relative deprivation; that in their turn (H3b) greater threat, greater present-day relative deprivation, and greater retrospective relative deprivation would negatively relate to intergroup outcomes, and that (H3c) the negative relationship between fast small gains and intergroup outcomes would no longer be significant. Finally, (H4) I expected to find support for these hypotheses, while controlling for the relationship between participants' current group status positions and intergroup outcomes.

Method

Participants and Procedure

Data collection took place in two major Ukrainian cities (Lviv and Dnepropetrovsk); potential participants were randomly approached at various public locations (e.g., bank, public square, market, hospital, bus station, etc.), and each participant could indicate their preferred language for the survey and instructions. Using the language preferred by the potential participant, a Russian-Ukrainian bilingual researcher explained that the goal of the study was to understand the current situation in Ukraine, with particular interest in intergroup relations within the country, and asked whether they would be willing to participate. Four hundred and two of those approached (224 men; 176 women, 2 did not indicate their sex) agreed to participate. Nearly an equal number of ethnic Ukrainian and ethnic Russian participants were recruited (198 ethnic Ukrainians and 204 ethnic Russians). To do so, researchers initially were instructed to

recruit both ethnic Ukrainian and ethnic Russian participants, but after researchers reached the desired number of ethnic Ukrainian respondents, they continued recruiting only participants who identified themselves as ethnic Russian. To ensure that participants were old enough to experience transitioning from the Soviet to the post-Soviet system, only individuals of 35 years of age and older were asked to participate. However, to avoid potential conflation of effects of changes in status due to retirement, an age cap for participants was set to 60 – the official retirement age for men and women in Ukraine (M_{men}= 45.60, *SD* = 5.54; M_{women}= 47.50, *SD* = 7.01).

Measures

As in Study 1, the survey included items assessing participants' perceptions of group status change, as well as items measuring unity, attitudes toward equity, openness to diversity, ethnocentrism, threat and the two types of relative deprivation. Additionally, participants reported ethnic group membership. Most of the scales were identical to the scales used in Study 1. The full list of items is presented in Appendix C.

Status change

Like in Study 1, group status was conceptualized as a combination of its three major aspects: economic, social esteem, and political power. For each of these dimensions, participants reported their perceptions of **Magnitude**, **Direction**, and **Speed** of group status change, precipitated by the collapse of the Soviet Union.

Magnitude was measured using three items like "*As you see it, with the disintegration of the Soviet Union, how much did the [ethnic Ukrainians'/ethnic Russians'] economic status change*", adapted from de la Sablonniere et al. (2009b) and

rated on a Likert-type scale of 0 (not at all) to 6 (very much). **Direction** and **Speed** of status change were measured with items identical to those in Study 1.

Outcomes and mediators

Items identical to those in Study 1 were used to assess **Unity**, **Attitudes toward Equity**, **Openness to Diversity**, and **Ethnocentrism**. However, the scale for **Threat** slightly differed from Study 1: only three items, the content of which was deemed appropriate for both ethnic Ukrainians and ethnic Russians, were used (e.g., *The Ukrainian government pays too much attention to the [Russian/Ukrainian] population of Ukraine, at the expense of its [Ukrainian/Russian] population*).

Using items adapted from de la Sablonniere and colleagues (2009b), two types of group relative deprivation were assessed: present-day (e.g., *In comparison to [ethnic Ukrainians/ethnic Russians], what is the current economic situation of [ethnic Russians/ethnic Ukrainians]?*), and retrospective (e.g., *Looking back*, *in terms of economic status, how did [ethnic Ukrainians/ethnic Russians] compare to [ethnic Russians/ethnic Ukrainians]* in Soviet Ukraine*?*). Participants rated their responses on a scale of –3 (much worse) to +3 (much better). For each of these comparisons, participants also reported the degree to which they felt angry and outraged about their group's relative position in the present and in the past (adapted from Guimond & Dube-Simard, 1983; *How much does this comparison make you feel angry (outraged)*; 0 – not at all to 6 – very much). Given that the affective component of relative deprivation tends to be a stronger predictor of group outcomes (Guimond & Dube-Simard, 1983; Leach, Iyer, & Pedersen, 2007; Smith, Cronin, & Kessler, 2008; Wohl & Brascombe, 2009), only affective

component of present-day relative deprivation (APD), and affective component of retrospective relative deprivation (ARD) were included in subsequent analyses.

Group status

Following the disintegration of the Soviet Union, ethnic Ukrainians are now considered to be a dominant group in Ukraine, while ethnic Russians are considered a subordinate group (Gudkov, 2006; Hangendoorn et al., 2001; Ryazanova & Andreychenko, 2008); hence, participants' ethnicity served as a proxy for their current group status. [3]

Results

Dealing with Missing Data

Multiple imputation was chosen as the preferred approach for dealing with missing data (Graham, Cumsille, & Elek-Fisk, 2003) and was conducted using PRELIS statistical software (Jöreskog & Sörbom, 1996). Matching variables for imputation were selected using procedures described in Collins, Schafer, and Kamm (2001).

Analytic Approach

First, preliminary analyses were conducted to assess participants' average responses to variables in the study. Then, Structural Equation Modeling approach (SEM; Bentler, 1980; Bentler & Dudgeon, 1996; Fassiner, 1987) with LISREL (Jöreskog & Sörbom, 1996) was utilized to address the main hypotheses of this study. The main analyses were conducted in three steps. First, confirmatory factor analyses were conducted to verify the hypothesized structure of the variables in the study: (1a) measurement model for predictor/mediator variables was fitted, (1b) measurement model for the outcome variables was fitted, (1c) and a full measurement model was fitted.

Second, three two-way and one three-way latent variable interaction terms were estimated and included (Ping, 2002; Ping, 2003; Ping, 2010): Magnitude x Direction, Magnitude x Speed, Direction x Speed, Magnitude x Direction x Speed. Third, structural equation analyses were conducted. To replicate the relationships that emerged in Study 1, as well as to test the relationships between dimensions of status change and general diversity-related outcomes, a nonmediated model, in which all outcomes were predicted by Magnitude, Direction, Speed, and the interactions between them, was fitted. Then, to test threat, APD and ARD as mediators, a mediated model was fitted, in which threat and the two types of relative deprivation were predicted by Magnitude, Direction, Speed, and the interactions between them, and were also predictors of unity, attitudes toward equity, openness to diversity, and ethnocentrism. To determine whether the mediated model was a better fit to the data than the nonmediated model, the two models were compared using a chi-squared difference test, and the indirect effects between the dimensions of status change and intergroup outcomes were estimated. Further, in order to control for the relationship between current group status and intergroup outcomes, group status was included as an additional predictor in both nonmediated and mediated models.

For all of the procedures involving confirmatory factor analyses and/or structural equation analyses, I used the chi-squared (χ^2) statistic to report model fit. Generally, if a proposed fitted model produced a covariance matrix close to the covariance matrix observed within the sample, χ^2 should be small relative to its degrees of freedom and statistically nonsignificant ($p > .05$). However, as χ^2 is a parameter that is highly sensitive to the sample size (Kline, 2005), I relied on three other fit indices which are less sensitive to sample size: comparative fit index (CFI; Bentler, 1990), root mean square of

approximation (RMSEA; Hu & Bentler, 1999), and standardized root mean square residual (SRMR; Hu & Bentler, 1999). Values close to 1 (or >.90) for CFI and close to 0 for RMSEA and SRMR (or < .1) were considered appropriate to conclude that the model fitted the data well. When comparing (nested) measurement and structural models, I used a chi-squared difference test ($\Delta\chi^2$), where a significant value of $\Delta\chi^2$ would lead to a rejection of the null hypothesis that the more parsimonious model was a better fit to the observed covariance matrix.

Preliminary Analyses

The initial examination of the variables in the study (see Table 6) showed that, on average, participants perceived that the status change following the disintegration of the Soviet Union was quite large in its magnitude (M = 3.98, SD = 1.48), slightly negative in its direction (M = -.31, SD = 1.61), and somewhat fast (M = 3.17, SD = 1.28). Furthermore, on average, participants gave rather modest ratings of unity (M = 1.05, SD = 1.75), attitudes toward equity (M = .44, SD = 1.30), and openness to diversity (M = 1.64, SD = .94); participants' average ratings of ethnocentrism fell on the low negative side of the scale (M = –.59, SD = 1.23). Finally, participants felt slightly threatened by the outgroup (M = .07, SD = 1.51), evaluated their group's position as slightly disadvantaged, both in the present (M = .11, SD = .89) and in the past (M = .08, SD = 1.25), and felt a little angry about these discrepancies both in the present (M_{APD} = .88, SD = 1.04) and in the past (M_{ARD} = .93, SD = 1.30).

Confirmatory Factor Analyses

The final full measurement model is presented in *Figures 3a–3c*. The steps that preceded the fitting of the final measurement model are described below.

Predictor and mediator variables

After mean-centering all of the predictor variables to avoid multicollinearity (Cohen et al., 2003), I conducted a confirmatory factor analysis to confirm the hypothesized structure of the predictor variables. To do so, seven latent constructs were estimated: Magnitude (indicated by 3 observed variables), Direction (indicated by 3 observed variables), Speed (indicated by 3 observed variables), Threat (indicated by 3 observed variables), APD (indicated by 7 observed variables), and ARD (indicated by 7 observed variables), and Group Status (indicated by 1 observed variable). The resultant measurement model yielded less than desirable fit ($\chi^2(297) = 1511.74$, $p < .001$; RMSEA = .10, CFI = .90, SRMR = .07). Further examination of this measurement model made obvious that four of the items contributing to APD loaded weaker than optimal on the latent factor (λs ranging between .49-.59) and had large error variances (θs ranging between .69-.76). To insure consistency across APD and ARD, these items were excluded as indicators from both of these latent factors (highlighted in bold in Appendix C). The resultant measurement model yielded better fit ($\chi^2(132) = 566.95$, $p < .001$; RMSEA = .09, CFI = .94, SRMR = .05). Now, with the exception of group status, which was indicated by a single observed variable, each of the other six latent factors in the measurement model was indicated by 3 observed variables; the indicators loaded at the value of .67 or higher on their respective factors, demonstrating good convergent validity.

Next, having observed rather high correlations between some of the factors (see Table 6), I tested several alternative nested models to ensure that the hypothesized factors possess reasonable discriminant validity. First, I fitted a model in which Magnitude, Direction, and Speed all loaded on one factor, by setting the correlations between the

three status dimensions to 1; the chi-squared difference test revealed that this manipulation made the fit of the model worse ($\Delta\chi^2(3) = 283.17$, $p < .001$). Further, comparisons of the original seven-factor model with models in which Magnitude and Speed, APD and ARD, or Threat and APD and ARD, were combined as one factor, also yielded significant chi-squared difference statistics ($\Delta\chi^2(1)$ ranging between 5 and 9, $p < .01$), leading to the rejection of these alternative models in favor of the original seven-factor model. Finally, to ensure that relative comparisons (i.e., APD, ARD) and temporal comparisons (i.e., Direction) were not conflated, I fitted a model in which APD, ARD, and Direction were combined into one latent factor; the resultant model fit was also inferior to the fit of the original seven-factor model ($\Delta\chi^2(2) = 14$, $p < .001$). Thus, this series of chi-squared difference tests allowed the conclusion that the factors possessed sufficient discriminant validity.

Outcome variables

As a next step, I conducted confirmatory factor analyses to verfy the hypothesized structure of the outcome variables. To this end, four latent constructs were estimated: Unity (indicated by 2 observed variables), Attitudes toward Equity (indicated by 3 observed variables), Openness to Diversity (indicated by 3 observed variables), and Ethnocentrism (indicated by 3 observed variables). The resultant measurement model yielded an overall satisfactory fit ($\chi^2(38) = 170.54$, $p < .001$; RMSEA = .09, CFI = .96, SRMR = .05).

Again, having noted rather high correlations between some of the factors (see Table 6), I tested several alternative nested models to ensure that the factors possessed reasonable discriminant validity. First, I fitted a model that tested the possibility that all

four outcomes measured the same construct, by restricting the correlations between all of the latent factors to 1. However, the chi-squared difference test showed that the one-factor model was significantly worse than the four-factor model ($\Delta\chi^2(6) = 518.55$, $p < .001$). I then compared the original four-factor model with two other models, in which Unity and Ethnocentrism, or Openness and Ethnocentrism were combined as one factor; the chi-squared difference tests confirmed that the four-factor model possessed superior fit ($\Delta\chi^2(1)$ ranging between 276.85 and 280.15, $p < .001$). Thus, this series of chi-squared difference tests allowed the conclusion that the hypothesized factors possessed sufficient degree of discriminant validity.

Full measurement model

Finally, I fitted the full measurement model, which consisted of 11 latent factors; the analysis of the full model yielded acceptable fit ($\chi^2(351) = 1170.30$, $p < .001$; RMSEA = .08, CFI = .94, SRMR = .06).

Latent variable interaction terms.[4] Three two-way and one three-way interaction terms were created between the latent variables of Magnitude, Direction, and Speed. The factor loadings and error variances for these terms were calculated using the unstandardized factor loadings of the indicators on their respective factors, error variances for the latent factors, and correlations and covariances between the latent factors from the full measurement model fitted without the interaction terms (see Ping, 2002; Ping, 2003; Ping, 2010). Then, the interaction terms were assigned the calculated factor loadings and included in the measurement model. The model fit for the full measurement model remained satisfactory and even improved after including interaction

terms $\chi^2(427) = 1356.30$, $p < .001$; RMSEA = .07, CFI = .95, SRMR = .05). The components of the full measurement model are illustrated in *Figures 3a-3c*.

Structural Equation Analyses

Two structural equation models were estimated in order to address the main hypotheses in this study. Figures 4-7 represent the snapshots of these models: each of the figures describes the relationship between the three-way interaction with one of the outcomes in a non-mediated and in a mediated model.

Non-mediated model

In order to test for the replication of the patterns that emerged in Study 1, I first fitted a model in which each of the intergroup outcomes was predicted only by Group Status, Magnitude, Direction, Speed, and the interactions between them. In order to be able to later compare this model with the mediated model using a chi-squared difference test, I also included potential mediator variables (Threat, APD, and ARD), but restricted their relationships with the rest of the variables to 0. The resultant model yielded rather poor fit ($\chi^2(472) = 2249.72$, $p < .001$; RMSEA = .09, CFI = .90, SRMR = .17).

Unity. Examination of structural paths revealed significant main effects of Direction, Magnitude, and Speed (see Table 7). Specifically, perceptions of more positive status changes were associated with less unity, perceptions of larger changes were associated with more unity, and faster changes were associated with less unity. Finally, a marginally significant main effect of Group Status also emerged: participants who belonged to a high status group reported more unity than participants who belonged to a low status group.

However, the main effects of status dimensions were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 4a*). The breakdown of the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change (B = -4.96, SE = 1.91, t = -2.59, $p \leq$ .01), but was also marginally significant for participants who perceived large status change (B = -2.97, SE = 1.64, t = -1.81, $p \geq .05$). Further simple slopes analyses showed that for those who perceived small changes, faster gain related to less unity (B = -12.56, t = -4.67, $p \leq .001$), while speed and loss did not interact in predicting unity ($t < 1.00$; see *Figure 4b*). Similarly, for those who perceived large changes, faster gain was also associated with less unity (B = -9.18, t = -3.94, $p \leq .001$), while speed and loss did not interact in predicting unity ($t < 1.00$; see *Figure 4c*).

Attitudes toward equity. Significant main effects of Direction, Magnitude, and Speed also emerged in predicting attitudes toward equity (see Table 7). Specifically, perceptions of more positive status changes were associated with less positive attitudes toward equity, perceptions of larger changes were associated with more positive attitudes toward equity, and faster changes were associated with less positive attitudes toward equity. Finally, a marginally significant main effect of group status also emerged: participants who belonged to a high status group reported more positive attitudes toward equity than participants who belonged to a low status group.

However, the main effects of status dimensions were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 5a*). Deconstructing the three-way

interaction showed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change (B = -4.14, SE = 1.65, t = -2.51, $p \leq .05$), but was also marginally significant for participants who perceived large status change (B = -2.51, SE = 1.42, t = -1.77, $p \geq .05$). Further simple slopes analyses revealed that for those who perceived small changes, faster gain related to less positive attitudes toward equity (B = -10.36, t = -4.34, $p \leq .01$), while speed and loss did not interact in predicting them ($t < 1.00$; *see Figure 5b*). Similarly, for those who perceived large changes, faster gain was also associated with less positive attitudes toward equity (B = -7.56, t = -3.56, $p \leq .01$), while speed and loss did not interact in predicting them ($t < 1.00$; *see Figure 5c*).

Openness to diversity. Significant main effects of Direction, Magnitude, and Speed emerged in predicting openness to diversity (see Table 7). Specifically, perceptions of more positive status changes were associated with less openness to diversity. At the same time, perceptions of larger changes were associated with more openness to diversity, while faster changes predicted less openness to diversity. The relationship between group status and openness to diversity did not reach statistical significance.

However, these effects were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 6a*). Deconstructing the three-way interaction showed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change (B = -3.16, SE = 1.20, t = -2.62, $p \leq .01$), but was also marginally significant for participants who perceived large status change (B = -1.84, SE = 1.04, t = -1.78, $p \geq .05$). Further simple slopes analyses revealed that for those who perceived small

changes, faster gain related to less openness to diversity (B = -7.72, t = -4.57, $p \leq .001$), while speed and loss did not interact in predicting openness to diversity ($t < 1.00$; *see Figure 6b*). Similarly, for those who perceived large changes, faster gain was also associated with less openness to diversity (B = -5.48, t = -3.71, $p \leq .001$), while speed and loss did not in teract in predicting openness to diversity ($t < 1.00$; *see Figure 6c*).

Ethnocentrism. Examination of structural paths revealed significant main effects of Direction, Magnitude, and Speed (see Table 7). Perceptions of more positive status changes were associated with more ethnocentrism, larger changes were associated with less ethnocentrism, and faster changes predicted more ethnocentrism. A marginally significant main effect of group status also emerged: participants who belonged to a high status group reported less ethnocentrism than participants who belonged to a low status group.

However, the effects of dimensions of status change were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 7a*). Deconstructing the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change (B = 5.98, SE = 2.25, t = 2.65, $p \leq .01$), but was also marginally significant for participants who perceived large status change (B = 3.54, SE = 1.94, t = 1.82, $p \geq .05$). Further simple slopes analyses showed that for those who perceived small changes, faster gain related to more ethnocentrism (B = 14.58, t = 4.62, $p \leq .001$), while speed and loss did not interact in predicting ethnocentrism ($t < 1.00$; *see Figure 7b*). Similarly, for those who perceived large changes, faster gain was

also associated with more ethnocentrism ($B = 10.43$, $t = 3.80$, $p \leq .001$), while speed and loss did not interact in predicting ethnocentrism ($t < 1.00$; *see Figure 7c*).

Mediated Model

The mediated model was estimated by freeing the paths between Threat, APD, ARD and group status, status change dimensions, their interactions, and the outcome variables. In other words, each mediator variable was predicted by Magnitude, Direction, Speed, Magnitude x Direction, Magnitude x Speed, Direction x Speed, and Magnitude x Direction x Speed, as well as by Group Status, and predicted Unity, Attitudes toward Equity, Openness to Diversity, and Ethnocentrism. The resultant model yielded satisfactory fit ($\chi^2(436) = 1367.80$, $p < .001$; RMSEA = .07, CFI = .95, SRMR = .05). The chi-squared difference test further showed that the mediated model fit the data significantly better than a more parsimonious non-mediated model ($\Delta\chi^2(36) = 881.92$, $p < .001$). Thus, the non-mediated model was rejected in favor of the mediated model.

Threat. Examination of structural paths (see Table 8a) revealed significant main effects of Direction, Magnitude, and Speed. Specifically, perceptions of more positive status changes were associated with more threat, larger changes were associated with less threat, and faster changes predicted more threat. No significant association emerged between group status and threat.

The main effects of status change dimensions were further qualified by significant Magnitude x Direction, Direction x Speed, and Magnitude x Speed x Direction interactions. The breakdown of the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change ($B = 1.63$, $SE = .36$, $t = 4.48$, $p \leq .001$), but was also significant for participants

who perceived large status change (B = .97, SE = .30, t = 3.21, $p \leq .01$). Further simple slopes analyses showed that for those who perceived small changes, faster gain related to more threat (B = 4.13, t = 8.14, $p \leq .001$), while speed and loss did not interact in predicting threat ($t < 1.00$; see *Figure 8a*). Similarly, for those who perceived large changes, faster gain was also associated with more threat (B = 3.01, t = 7.00, $p \leq .001$), while speed and loss did not interact in predicting threat ($t < 1.00$; *see Figure 8b*).

APD. Significant main effects of Direction, Magnitude, and Speed also emerged in predicting APD (see Table 8a). Perceptions of more positive status changes were associated with more APD, larger changes were associated with less APD, and faster changes predicted more APD. Group Status was a significant negative predictor of APD: participants in a high status group experienced less APD than participants in a low status group.

The main effects of status change dimensions were further qualified by significant Magnitude x Direction, Direction x Speed, and Magnitude x Speed x Direction interactions. Deconstructing the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change (B = 2.49, SE = 0.56, t = 4.39, $p \leq .001$), but was also significant for participants who perceived large status change (B = 1.47, SE = 0.47, t = 3.11, $p \leq .01$). Further simple slopes analyses showed that for those who perceived small changes, faster gain related to more APD (B = 6.14, t = 7.63, $p \leq .001$), while speed and loss did not interact in predicting APD ($t < 1.00$; *see Figure 9a*). Similarly, for those who perceived large changes, faster gain was also associated with more APD (B = 4.41, t = 6.65, $p \leq .001$), while speed and loss did not interact in predicting APD ($t < 1.00$; *see Figure 9b*).

ARD. Examination of structural paths (see Table 8a) revealed significant main effects of Direction, Magnitude, and Speed. Specifically, perceptions of more positive status changes were associated with more ARD, larger changes were associated with less ARD, while faster changes predicted more ARD. Group Status was a significant negative predictor of ARD: participants in a high status group experienced less ARD than participants in a low status group.

The main effects of status change dimensions were further qualified by significant Magnitude x Direction, Direction x Speed, and Magnitude x Speed x Direction interactions. Deconstructing the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change ($B = 1.57$, $SE = .33$, $t = 4.75$, $p \leq .001$), but was also significant for participants who perceived large status change ($B = 0.89$, $SE = .27$, $t = 3.23$, $p \leq .01$). Further simple slopes analyses showed that for those who perceived small changes, faster gain related to more ARD ($B = 3.82$, $t = 8.21$, $p \leq .001$), while speed and loss did not interact in predicting ARD ($t < 1.00$; *see Figure 10a*). Similarly, for those who perceived large changes, faster gain was also associated with more ARD ($B = 2.66$, $t = 6.96$, $p \leq .001$), while speed and loss did not interact in predicting ARD ($t < 1.00$; *see Figure 10b*).

Unity. As presented in Table 8b, greater threat was associated with less unity. Further, APD was also a negative predictor of unity, although this relationship was only marginally significant; finally, ARD was a significant negative predictor of unity.

Inclusion of mediators into the model changed the direct paths between Magnitude, Direction, and Speed and unity, as well as between group status and unity (see Table 8b). In the mediated model, more positive status changes were now associated

with more unity, larger status changes were associated with less unity, and faster status changes were associated with more unity. Group status was not a significant predictor of unity in the mediated model.

The main effects of status change dimensions were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 11a*). Deconstructing the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change ($B = 1.62$, $SE = .59$, $t = 2.73$, $p \leq .01$), but was also significant for participants who perceived large status change ($B = 1.00$, $SE = .49$, $t = 2.02$, $p \leq .05$). Further simple slopes analyses showed that in the mediated model, for those who perceived small changes, faster gain related to more unity ($B = 4.05$, $t = 4.87$, $p \leq .001$), while speed and loss did not interact in predicting unity ($t < 1.00$; *see Figure 11b*). Similarly, for those who perceived large changes, faster gain was also associated with more unity ($B = 3.00$, $t = 4.26$, $p \leq .001$), while speed and loss did not interact in predicting unity ($t < 1.00$; *see Figure 11c*).

Attitudes toward equity. As presented in Table 8b, greater threat was associated with less positive attitudes toward equity. Similarly, both APD and ARD were significant negative predictors of attitudes toward equity.

Inclusion of mediators into the model changed the direct paths between Magnitude, Direction, and Speed and attitudes toward equity, as well as between group status and attitudes toward equity (see Table 8b). In the mediated model, more positive status changes were associated with more positive attitudes toward equity, larger status changes were associated with less positive attitudes toward equity, and faster status

changes were associated with more positive attitudes toward equity. Group status was a significant negative predictor of attitudes toward equity in the mediated model: participants in the high status group reported less positive attitudes toward equity than participants in the low status group.

The main effects of status change dimensions were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 12a*). Deconstructing the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change ($B = 3.14$, $SE = .88$, $t = 3.55$, $p \leq .001$), but was also significant for participants who perceived large status change ($B = 1.83$, $SE = .74$, $t = 2.48$, $p \leq .05$). Further simple slopes analyses showed that in the mediated model, for those who perceived small changes, faster gain related to more positive attitudes toward equity ($B = 8.15$, $t = 6.56$, $p \leq .001$), while speed and loss did not interact in predicting attitudes toward equity ($t < 1.00$; *see Figure 12b*). Similarly, for those who perceived large changes, faster gain was also associated with more positive attitudes toward equity ($B = 5.92$, $t = 5.55$, $p \leq .001$), while speed and loss did not interact in predicting attitudes toward equity ($t < 1.00$; *see Figure 12c*).

Openness to diversity. As presented in Table 8b, greater threat was associated with less openness to diversity. APD was also a significant negative predictor of openness to diversity, while ARD was a marginally significant negative predictor of openness to diversity.

Inclusion of mediators into the model changed the direct paths between Magnitude, Direction, and Speed and openness to diversity, as well as between group

status and openness to diversity (see Table 8b). In the mediated model, more positive status changes were associated with more openness to diversity, larger status changes were associated with less openness to diversity, and faster status changes were associated with more openness to diversity. Group status was now a significant negative predictor of openness to diversity: participants in the high status group reported less openness to diversity than participants in the low status group.

The main effects of status change dimensions were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 13a*). Deconstructing the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change ($B = 1.75$, $SE = .56$, $t = 3.15$, $p \leq .01$), but was also significant for participants who perceived large status change ($B = 1.09$, $SE = .46$, $t = 2.35$, $p \leq .05$). Further simple slopes analyses showed that in the mediated model, for those who perceived small changes, faster gain related to more openness to diversity ($B = 4.70$, $t = 5.94$, $p \leq .001$), while speed and loss did not interact in predicting openness to diversity ($t < 1.00$; *see Figure 13b*). Similarly, for those who perceived large changes, faster gain was also associated with more openness to diversity ($B = 3.57$, $t = 5.47$, $p \leq .001$), while speed and loss did not interact in predicting openness to diversity ($t < 1.00$; *see Figure 13c*).

Ethnocentrism. As presented in Table 8b, greater threat was associated with more ethnocentrism. APD and ARD also exhibited positive relationships with ethnocentrism, although these were only marginally significant.

Inclusion of mediators into the model changed the direct paths between Magnitude, Direction, and Speed and ethnocentrism, as well as between group status and ethnocentrism (see Table 8b). In the mediated model, more positive status changes were associated with less ethnocentrism; larger status changes were associated with more ethnocentrism, and faster status changes were associated with less ethnocentrism. Group status was not a significant predictor of ethnocentrism.

The main effects of status change dimensions were further qualified by significant Magnitude x Direction, Direction x Speed interactions, as well as by a Magnitude x Speed x Direction interaction (see *Figure 14a*). Deconstructing the three-way interaction revealed that the Direction x Speed interaction effect was the strongest for participants who perceived small status change (B = -2.51, SE = .81, t = -3.10, $p \leq .01$), but was also significant for participants who perceived large status change (B = -1.61, SE = .67, t = -2.40, $p \leq .05$). Further simple slopes analyses showed that in the mediated model, for those who perceived small changes, faster gain related to less ethnocentrism (B = -6.86, t = -6.05, $p \leq .001$), while speed and loss did not interact in predicting ethnocentrism ($t <$ 1.00; *see Figure 14b*). Similarly, for those who perceived large changes, faster gain was also associated with less ethnocentrism (B = -5.34, t = -5.52, $p \leq .001$), while speed and loss did not interact in predicting ethnocentrism ($t <$ 1.00; *see Figure 14c*).

Overall, as evident from the analyses described above, in the mediated model, the nature of the relationship between the three-way interaction with unity, attitudes toward equity, openness to diversity, and ethnocentrism, was diametrically different from the one observed in the nonmediated model. Specifically, when threat, APD, and ARD were included as mediators, faster status gains, both small and large, were associated with

more unity, more positive attitudes toward equity, more openness, and less ethnocentrism.

Indirect Effects

As a final step to determining whether Threat, APD, and ARD were significant mediators between status dimensions and intergroup outcomes, I evaluated the indirect effects that emerged in the mediated model (Shrout & Bolger, 2002). As summarized in Table 9, the indirect paths between the status change dimensions and their interactions with the intergroup outcomes were significant or marginally significant (except for Magnitude x Speed, which was not a significant predictor of intergroup outcomes in either of the models). Together with the superior fit of the mediated model, this analysis suggests that threat, and present-day and retrospective relative deprivation may be important psychological mechanisms underlying the link between the dimensions of status change and intergroup outcomes.

Discussion

Study 2 pursued several goals. First, Study 2 aimed to replicate the relationships that emerged between the fast small gains and outgroup-specific outcomes (i.e, *unity* and *threat*). Secondly, Study 2 tested the relationships between status change dimensions and general diversity-related outcomes (i.e., *general attitudes toward equity, openness to diversity, ethnocentrism*) with a larger and older sample of Ukrainian citizens – those, who grew up in the Soviet Union and experienced the transformation firsthand. Third, Study 2 tested the prediction that threat, present-day relative deprivation, and retrospective relative deprivation would not only be negative predictors of intergroup outcomes, but would also mediate the relationships between dimensions of status change

and intergroup outcomes. Finally, Study 2 examined the relationships between the dimensions of status change and intergroup outcomes while controlling for the participants' current group status in the Ukrainian society.

Overall, the patterns of results in Study 2 resembled the relationships observed in Study 1. Direction and speed of status change mattered the most for participants who perceived small status changes: faster small gains were associated with less unity, more threat, but also with less positive attitudes toward equity, less openness to diversity, and more ethnocentrism. Thus, unlike in Study 1, in this sample of older Ukrainians dimensions of status change predicted both outgroup-specific outcomes and general diversity-related outcomes. This suggests that perceptions of status change may be particularly important predictors of intergroup outcomes for those who experienced both the before and after of societal transformation.

Study 2 also shed some light on the psychological mechanisms that might explain why fast small gains predicted negative intergroup outcomes. In addition to predicting more threat, fast small gains related to more present-day relative deprivation and more retrospective relative deprivation; in their turn, perceptions of greater threat, greater present-day deprivation, and greater retrospective deprivation were associated with less unity, less positive attitudes toward equity, less openness to diversity, and more ethnocentrism. Importantly, the model in which threat, present-day relative deprivation, and retrospective relative deprivation were included as mediators was a better reflection of the data than the non-mediated model. Considered together with significant indirect effects observed in this study, such superior fit of the mediated model further supported the prediction that negative relationships that emerged between fast small gains and

intergroup outcomes might be carried through threat, present-day relative deprivation, and retrospective relative deprivation. These findings support the view that societal changes may be important antecedents of perceptions of threat and relative deprivation (e.g., Bettencourt et al., 2001; Pettigrew, 1971; de la Sablonniere et al., 2010; Stevens, 2002), as well as present them as important predictors of intergroup outcomes in the context of societal transformation (Albert, 1971; Brown & Middendorf, 1996; Mummendey et al., 1992; Stevens, 2002).

Interestingly, the signs of the direct paths between fast small gains and intergroup outcomes, observed in the non-mediated model, changed when threat, present-day relative deprivation, and retrospective relative deprivation were included in the model as mediators. Now, fast small gains were associated with *more* unity, *more* positive attitudes toward equity, *more* openness to diversity, and *less* ethnocentrism. Furthermore, while the interaction between gain and speed was the strongest among participants who perceived small status changes, in the mediated model, faster gains also consistently predicted more positive intergroup outcomes among participants who perceived large changes. Taken together, these findings suggest that, whether large or small, positive status changes might only be positive for intergroup outcomes to the extent that group members feel less threatened by an outgroup, and to the extent that intergroup comparisons in the present are perceived as less insidious, and the thought of the group's past disadvantage no longer evokes anger.

It is worth noting that retrospective relative deprivation emerged as an important predictor of intergroup outcomes. This finding supports the view that following societal transformation, perceptions of past injustices are an important factor in shaping

intergroup relations (Ross & Wilson, 2002; Wohl & Brascombe, 2009), and that in the context of societal transformation, retrospective relative deprivation might be an essential component for understanding intergroup outcomes (e.g., Duckitt & Mphuthing, 2002). Future research should use an experimental approach to formally test and compare the effects of both present-day relative deprivation and retrospective relative deprivation on intergroup relations after societal transformation.

Finally, dimensions of status change predicted intergroup outcomes in addition to what could be explained by participants' current group status position. Corroborating earlier findings with participants from Eastern European countries (e.g., Kunovich, 2004), in both non-mediated and mediated models, group status was a rather weak predictor of intergroup outcomes. Interestingly, relationships between group status and intergroup outcomes that emerged in the non-mediated model agreed with the literature that posits high group status as a predictor of positive intergroup outcomes (e.g., Brauer, 2001; Grant & Brown, 1995; Judd et al., 1995); however, the findings from the mediated model agreed with the side of literature, which reports a association between high group status and negative intergroup outcomes (e.g., Kluegel & Bobo, 2003; Lorenzi-Cioldi et al., 1995; Quillian, 1995; Sachdev & Bourhis, 1991). Considered together, these findings suggest that knowing groups' current positions is not sufficient for understanding intergroup outcomes following societal transformation (see also Kunovich, 2004; Moghaddam & Crystal, 2000; Moghaddam & Lvina, 2002), and that threat, present-day relative deprivation, and retrospective relative deprivation, should be taken into account when examining the relationship between group status and intergroup relations.

Overall, Study 2 provided further evidence that considering people's perceptions of status change is essential for better understanding of how intergroup relations are shaped in the aftermath of societal change. In addition to replicating the relationships that emerged in Study 1, Study 2 showed that for people who lived through the actual societal transformation dimensions of status change might be important predictors of intergroup outcomes. Further, Study 2 began investigating threat and relative deprivation as psychological processes that might help explain why intergroup tensions may arise even after positive status changes. In doing so, Study 2 was first to introduce the concept of retrospective relative deprivation, as well as to test dimensions of status change as antecedents of threat and relative deprivation.

CHAPTER 5

GENERAL DISCUSSION

Although societal transformations have become a rather frequent occurrence of the last hundred years (Drucker, 1994; Manhire, 2012), social psychology paid scarce attention to intergroup relations in their aftermath (Moghaddam, 2000; Stevens, 2002). Yet, intergroup tensions often arise in times of change, particularly when transformations are accompanied by shifts within societal hierarchy (Bettleheim & Janowitz, 1964; Staub, 2008). The goal of this dissertation project was to narrow this gap within social psychological inquiry, and to examine whether and how different dimensions of status change relate to intergroup outcomes. To do so, I built on theoretical discourse on societal transformation (e.g., Bettelheim & Janowitz, 1950; Moghaddam & Crystal, 2000; Parsons, 1964; Rogers, 2003), as well as on early social psychological research on the role of status change in intergroup relations (Bettelheim & Janowitz, 1964; Curtis, 1958; Pettigrew, 1971; Silberstein & Seeman, 1957). Further, I tested threat and relative deprivation (Crosby, 1976; Gurr, 1970; Runciman, 1966; Stouffer et al., 1949; Walker & Smith, 2001) as psychological processes underscoring the relationship between dimensions of status change and intergroup outcomes.

To address the questions in this research, two studies were conducted in Ukraine – the context particularly fitting for investigating the consequences of societal transformation (Gudkov, 2006; Minahan, 2004). Study 1, conducted with college-age ethnic Ukrainians, addressed the question of *whether* perceptions of different dimensions of status change (magnitude, direction, and speed) had a bearing on intergroup outcomes. Study 2, conducted with older ethnic Ukrainian and ethnic Russian citizens of Ukraine,

replicated and extended the findings in Study 1, as well as addressed the question of *why* such links might have emerged.

Grounding my predictions in early empirical work on status change (e.g., Bettelheim & Janowitz, 1964; Curtis, 1958), I initially expected that, whether positive or negative, large and rapid changes in group status would be associated with most negative intergroup outcomes. However, both studies consistently demonstrated that the dimensions of status change were particularly important for those who perceived that their group experienced status gain: fast gains were associated with more negative intergroup outcomes, especially when such gains were also estimated to be small.

Interestingly, while for younger participants (Study 1) dimensions of change predicted only outgroup-specific outcomes, for older participants, who lived through the transformation (Study 2), dimensions of status change were also predictors of general diversity-related outcomes. The implications of these findings can be discussed from two sides: on the one hand, dimensions of status change are important in predicting outgroup-specific outcomes even for the generation that did not experience transformation first-hand; on the other hand, living through transformation accompanied by shifts in group status may have consequences beyond the immediate outgroup, and impact how group members view diversity in general. These findings begin to explain why general ethnic strife might intensify when diverse societies experience societal change (see Hanson & Kopstein, 1997; Hangendoorn et al., 2001; Staub, 1997).

Of great interest to the current investigation were the psychological processes underlying the relationship between the dimensions of status change and intergroup outcomes. The findings in this research supported the proposition that threat and relative

deprivation might be among psychological processes explaining why fast small gains had negative associations with intergroup outcomes. Specifically, fast small gains predicted more threat, more present-day relative deprivation, and more retrospective relative deprivation, which, in turn, were associated with less unity, less positive attitudes toward equity, less openness to diversity, and more ethnocentrism. In fact, when threat, present-day relative deprivation, and retrospective relative deprivation were taken into account, faster gains, both small and large, predicted more positive intergroup outcomes.

Taken together, the findings in both studies suggest that to ensure that the outcomes of societal transformation are truly positive, individuals' psychological reactions to these changes should be considered. It appears that the positive changes will lead to positive intergroup outcomes only to the extent that group members' perceptions of group threat are alleviated, and they have constructive ways to understand, explain, and cope with the imbalances of the present, as well as with the injustices of the past (see also Staub, 1996; Staub, 2008).

Overall, the present research contributes to the social psychological study of intergroup relations in several ways. First, it examines a wide array of intergroup outcomes in the aftermath of societal transformation – an endeavor rarely attempted by social psychologists (Rogers, 2003; Stevens, 2002; but see Duckitt & Mphuthing, 2002; de la Sablonniere et al., 2009a,b). Secondly, it is one of very few studies to specifically investigate how different aspects of status change relate to intergroup outcomes. Next, the findings in this research contribute to the existing theories aiming to explain intergroup phenomena. For example, by testing the links between status dimensions and threat, the current research adds to understanding of antecedents of intergroup threat. Finally, the

present research is the first to introduce and test the role of *retrospective* relative deprivation in predicting intergroup outcomes, thereby moving toward a potential contribution to relative deprivation theory.

Yet, limitations of this research should be noted. Among most prominent ones is the largely correlational nature of this research, which precludes drawing any causal links between the perceptions of status change and intergroup outcomes. However, the manipulation of magnitude of status change in Study 1 demonstrates that the dimensions of status change can be successfully manipulated, and future studies should seek ways to do so. Relatedly, to confirm the mediative effects of threat, present-day relative deprivation, and retrospective relative deprivation, future research should investigate how experimentally manipulated dimensions of status change affect these variables, and then experimentally manipulate threat, present-day relative deprivation, and retrospective relative deprivation, to test how they affect intergroup outcomes.

Short scales measuring intergroup outcomes are another limitation of this research; future studies should aim to enhance the validity of these scales, by increasing the number of items that comprise them. As the items for the scales in the present research were adapted both from the scales created by Western, Ukrainian, and Russian social scientists, future research should also aim to find measures developed and/or thoroughly pilot-tested in the cultural context where the study will take place. Such an approach will ensure that the studied phenomena mesh well with participants' cultural reality.[5]

Additionally, since the main focus of the present research was the relationship between the dimensions of status change and intergroup outcomes, I merely controlled

for the relationship between group status and intergroup outcomes. However, further steps should be taken in investigating the role of the groups' current status positions in the context of societal transformation. First, since an individual's or group's satisfaction with their position is not necessarily related to their objective circumstances but, rather, to their *subjective* evaluations of their position (e.g., Dambrun et al. 2006; Runciman, 1969), future studies could examine whether subjective perceptions of group status would be a stronger predictor of intergroup outcomes in the context of societal transformation. Second, future research should also examine whether such subjective perceptions of group status moderate the relationships between the dimensions of status change and intergroup outcomes. For example, participants who perceive that their group gained status and now holds high status within the society may experience less threat as compared to the participants who also perceive that their group gained status, but is still in a low status position.

The disintegration of the Soviet Union is just one example of drastic societal transformation; however, the world has experienced many others since, many of which are very recent or ongoing (e.g., Egypt, Libya). Revolutions, transformations, and risky changes have been the wheels of world progress. Destroying autocratic regimes that perpetuate violations of human rights and ideologies of terror may lead to better lives for generations to come; however, as evidenced by the ongoing challenges in Central and Eastern Europe, by current developments in Egypt, post-transformation rebuilding is often encumbered by ethnic and religious strife and conflict. For change to bring openness, for freedom to be accompanied by peace and security, we need to attend to the psychological needs and reactions of those undergoing the transformation. The current

research is merely a first step toward a psychological understanding of the effects of societal transformations on intergroup relations.

Table 1. Correlations between Variables in Study 1

	1	2	3	4	6	7	8
1. Direction	--						
2. Speed	–.23**	--					
3. Unity	–.04	.01	--				
4. Threat	–.19*	.05	–.54***	--			
6. Attitudes toward Equity	.11	–.10	.37**	–.32***	--		
7. Openness to Diversity	–.03	–.01	.10	.03	.31***	--	
8. Ethnocentrism	–.17*	.07	–.40***	.48***	–.45***	–.10	--

Note: * $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Table 2. Mean Scores and Standard Deviations of Variables in Study 1

Variables	*M*	*SD*
Direction	.57	1.23
Speed	2.91	1.00
Unity	–.19	1.79
Threat	.82	1.19
Attitudes toward Equity	.59	1.13
Openness to Diversity	1.81	.94
Ethnocentrism	–.50	1.33

Table 3. Summary of Regression Analyses Predicting Unity and Threat (Study 1)

	Unity			Threat		
Predictor Variables	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Magnitude	.07	.29	.02	-.25	.20	-.11
Direction	.45*	.20	.35*	-.32*	.13	-.34*
Speed	.17	.25	.11	.16	.17	.13
Magnitude x Direction	-.32	.27	-.20	.26	.19	.21
Magnitude x Speed	-.04	.32	-.02	-.30	.22	-.20
Direction x Speed	-.66*	.26	-.63*	.36*	.16	.47*
Magnitude x Direction x Speed	.59*	.29	.53*	-.49**	.18	-.57**
R^2		.10*			.11*	
F		2.03			2.21	

Note: *$p \leq .05$ ** $p \leq .01$ ***$p \leq .001$

Table 4. Summary of Regression Analyses Predicting Attitudes toward Equity, Openness to Diversity, and Ethnocentrism (Study 1)

	Attitudes toward Equity			Openness to Diversity			Ethnocentrism		
Predictor Variables	*B*	*SE B*	*B*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Magnitude	-.39^{+}	.20	-.17^{+}	-.35	.31	-.10	-.11	.24	-.04
Direction	.40	.13	.04	.26	.20	.19	.03	.15	.03
Speed	-.21	.17	-.19	.51	.25	.30	-.04	.20	-.03
Magnitude x Direction	.20	.18	.17	-.46	.28	.26	-.10	.22	-.07
Magnitude x Speed	.21	.22	.14	-.40	.33	.18	.21	.26	.12
Direction x Speed	.01	.16	.02	.11	.24	-.10	-.10	.18	-.12
Magnitude x Direction x Speed	-.16	.18	-.19	.08	.27	.06	.03	.21	.03
R^2		.07			.07			.04	
F		1.33			1.39			.64	

Note: *$p \leq .05$ ** $p \leq .01$ ***$p \leq .001$

Table 5. Mean scores and standard deviations of variables in Study 2

Variables	*M*	*SD*
Magnitude	3.98	1.48
Direction	–.31	1.61
Speed	3.17	1.28
Threat	.07	1.51
APD	.88	1.04
ARD	.93	1.30
Unity	1.05	1.75
Attitudes toward Equity	.44	1.30
Openness to Diversity	1.64	.94
Ethnocentrism	–.59	1.23

Table 6. Correlations between Latent Variables in Study 2

	1	2	3	4	5	6	7	8	9	10	11
1. Group Status	--										
2. Magnitude	-.19***	--									
3. Direction	-.38***	-.36***	--								
4. Speed	.04	.70***	-.55***	--							
5. Threat	.03	-.40***	.35***	-.29***	--						
6. APD	-.19***	-.15*	.20**	.01	.55***	--					
7. ARD	-.55***	-.04	.60***	-.11*	.42***	.50***	--				
8. Unity	.34***	.19*	-.52***	.19*	-.79***	-.55***	-.70***	--			
9. Attitudes toward Equity	.30***	-.01	-.40***	.10*	-.45***	-.45***	-.67***	.67***	--		
10. Openness to Diversity	-.02	-.16*	-.19	.19	-.76***	-.46***	-.33***	.69***	.57***	--	
11. Ethnocentrism	-.17**	-.15*	.33	-.25	.85***	.41***	.44***	-.73***	-.63***	-.81***	--

Note: * $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Table 7. Structural Paths from the Non-mediated Model (Study 2)

	Unity		Attitudes toward Equity		Openness to Diversity		Ethnocentrism	
Predictor Variables	*B*	*SE B*	*B*	*SE B*	*B*	*SE B*	*B*	*SE B*
Group Status	2.24^{+}	1.20	1.85^{+}	1.03	.98	.75	-2.26^{+}	1.41
Magnitude	2.79*	1.22	2.13*	1.05	1.69*	.77	-3.07*	1.43
Direction	-1.71**	.65	-1.46**	.56	-.88*	.41	1.77*	.77
Speed	-4.13*	1.58	-3.31*	1.60	-2.35*	1.17	4.41*	2.20
Magnitude x Direction	2.34*	1.12	2.22*	.97	1.51*	.70	-2.86*	1.32
Magnitude x Speed	.07	.40	.07	.34	.07	.25	-.02	.47
Direction x Speed	-3.97*	1.73	-3.33*	1.49	-2.50*	1.49	4.76*	2.04
Magnitude x Direction x Speed	.67*	.29	.55*	.25	.44*	.18	–.82*	.34
R^2	.81		.67		.83		.81	

Note: $.05 \leq {}^{+}p \leq .10$ $*p \leq .05$ $** p \leq .01$ $***p \leq .001$

Table 8(a). Structural Paths from the Mediated Model: Predicting Threat, APD, and ARD (Study 2)

	Threat		APD		ARD	
Predictor Variables	*B*	*SE B*	*B*	*SE B*	*B*	*SE B*
Group Status	.19	.34	-1.18***	.43	-1.28***	.27
Magnitude	-1.11***	.25	-1.46***	.33	-.58***	.20
Direction	.61***	.15	.71***	.19	.85***	.12
Speed	1.36***	.37	1.91***	.48	1.15***	.30
Magnitude x Direction	-.62***	.20	-1.13***	.27	-.54***	.16
Magnitude x Speed	-.01	.14	-.21	.18	-.01	.11
Direction x Speed	1.34***	.30	1.63***	.39	1.07***	.24
Magnitude x Direction x Speed	-.23***	.07	-.30***	.09	-.22***	.05
R^2	.64		.80		.73	

Note: *$p \leq .05$ ** $p \leq .01$ ***$p \leq .001$

Table 8(b). Structural Paths from the Mediated Model: Intergroup Outcomes (Study 2)

	Unity		Attitudes toward Equity		Openness to Diversity		Ethnocentrism	
Predictor Variables	*B*	*SE B*	*B*	*SE B*	*B*	*SE B*	*B*	*SE B*
Group Status	.40	.49	-1.50*	.74	-.93*	.47	.67	.71
Threat	-.84***	.13	-.66***	.15	-.61***	.11	1.44***	.19
APD	-.44^{+}	.24	-.71*	.34	-.51*	.22	.49	.32
ARD	-.44***	.11	-.44***	.11	-.84^{+}	.14	.22^{+}	.13
Magnitude	-.95*	.44	-1.99***	.67	-1.17*	.44	1.84**	.43
Direction	.49^{+}	.25	1.12**	.37	.68**	.24	-.92**	.35
Speed	1.30*	.61	2.81**	.93	1.72**	.59	-2.60**	.85
Magnitude x Direction	-.81*	.36	-1.26*	.53	-.87*	.34	1.17*	.50
Magnitude x Speed	-.01	.13	-.02	.26	-.01	.24	.01	.24
Direction x Speed	1.31*	.52	2.49**	.78	1.42**	.49	-2.06**	.71
Magnitude x Direction x Speed	-.21*	.11	-.44**	.16	-.22*	.10	.30*	.15
R^2	.83		.80		.83		.90	

Note: $.05 \leq {}^{+}p \leq .10$ $*p \leq .05$ $** p \leq .01$ $***p \leq .001$

Table 9. Indirect Effects

	Unity		Attitudes toward Equity		Openness to Diversity		Ethnocentrism	
Predictor Variables	*B*	*SE B*	*B*	*SE B*	*B*	*SE B*	*B*	*SE B*
Group Status	1.25^{+}	.65	2.04*	.84	.91^{+}	.53	-1.12	.84
Magnitude	1.83**	.54	2.27**	.72	1.51**	.47	-2.43***	.68
Direction	-1.20***	.31	-1.63***	.40	-.86***	.26	1.41***	.39
Speed	-2.50***	.75	-3.24**	1.01	-1.98**	.64	3.14**	.96
Magnitude x Direction	1.26**	.42	1.67**	.57	1.04**	.37	-1.56**	.54
Magnitude x Speed	.10	.24	.16	.31	.11	.19	-.12	.31
Direction x Speed	-2.32***	.62	-2.95***	.83	-1.81***	.53	2.96***	.84
Magnitude x Direction x Speed	.43**	.13	.56**	.17	.33**	.12	-.51**	.18

Note: $.05 \leq {}^{+}p \leq .10$ $*p \leq .05$ $** p \leq .01$ $***p \leq .001$

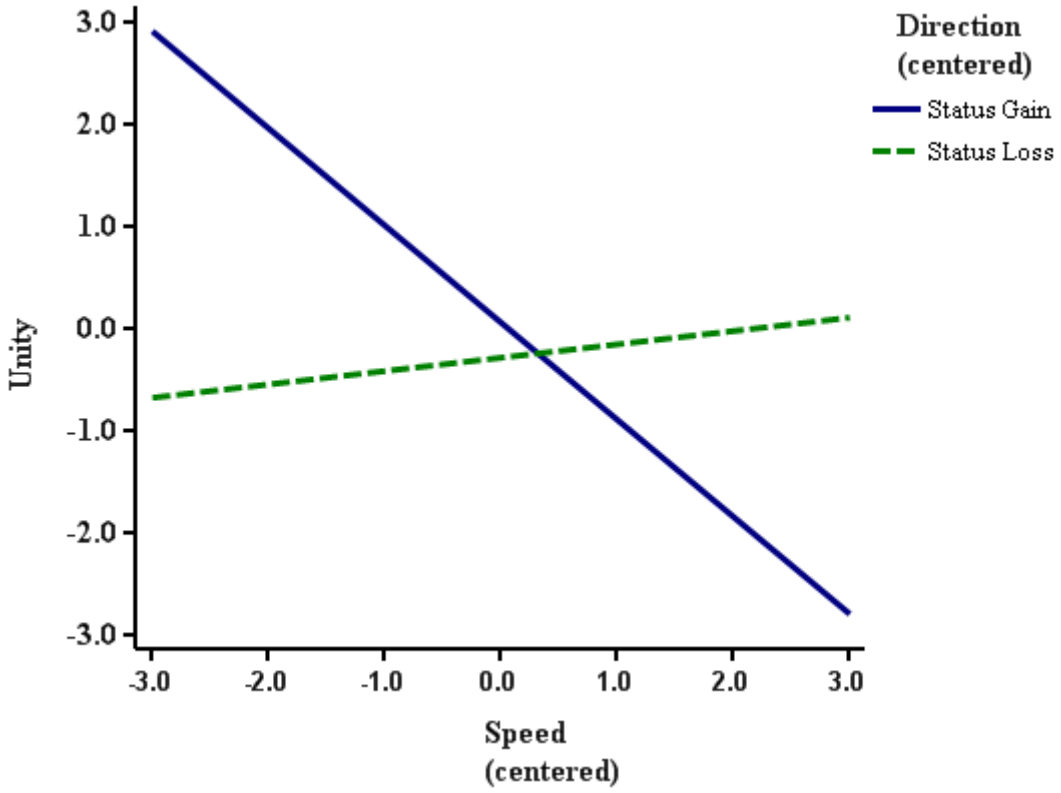


Figure 1. Unity and Direction x Speed association in the small status change condition (Study 1)

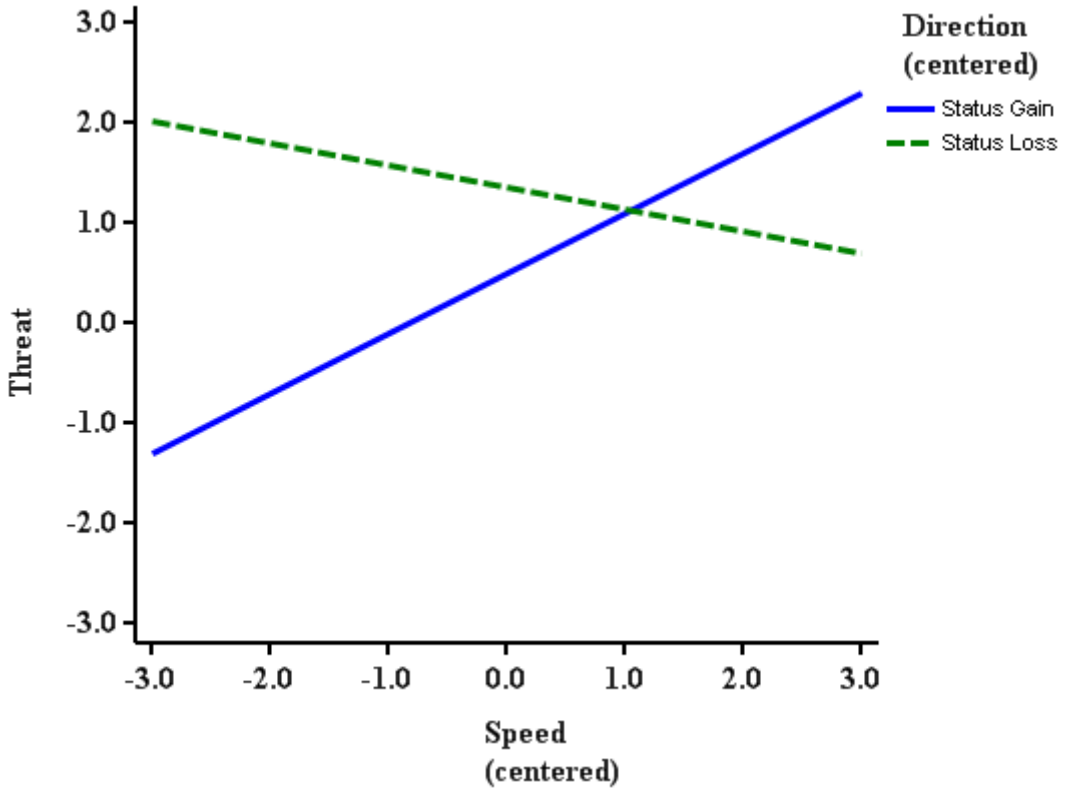
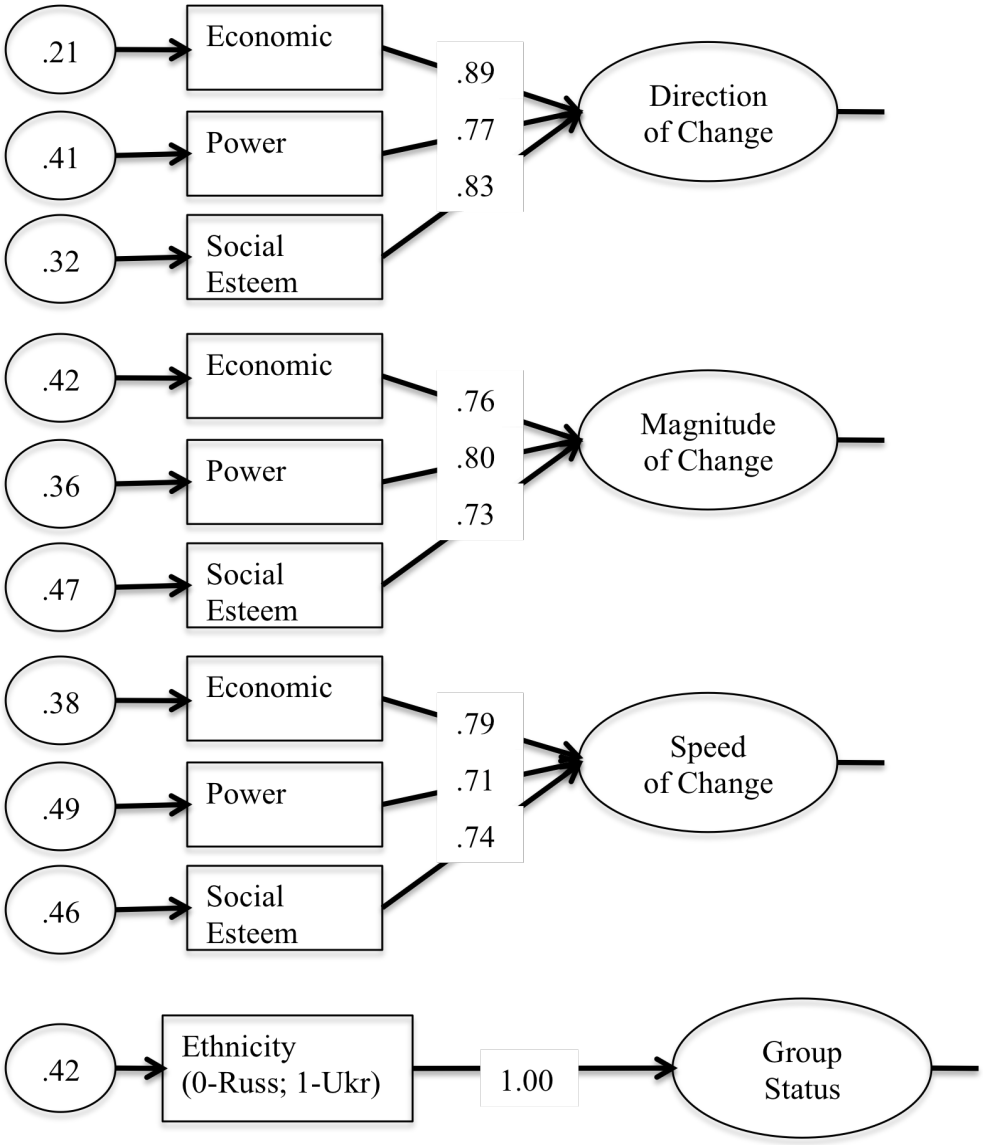


Figure 2. Threat and Direction x Speed association in the small status change condition (Study 1)


.21
Economic
.41
Power
.32
Social Esteem
.89
.77
.83
Direction of Change
.42
Economic
.36
Power
.47
Social Esteem
.76
.80
.73
Magnitude of Change
.38
Economic
.49
Power
.46
Social Esteem
.79
.71
.74
Speed of Change
.42
Ethnicity (0-Russ; 1-Ukr)
1.00
Group Status

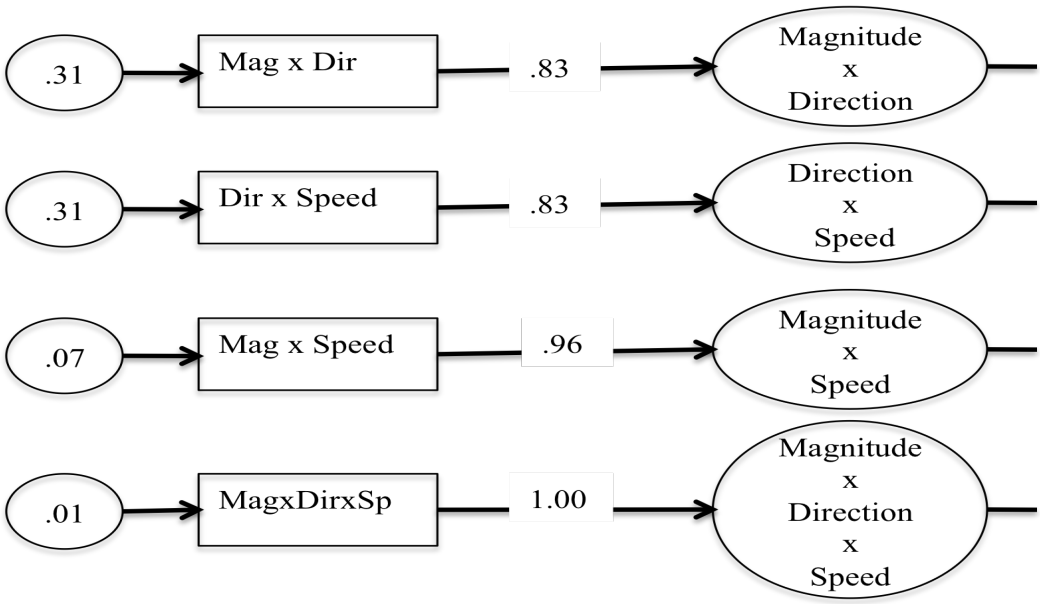


Figure 3a. Predictors and interaction terms in the final full measurement model

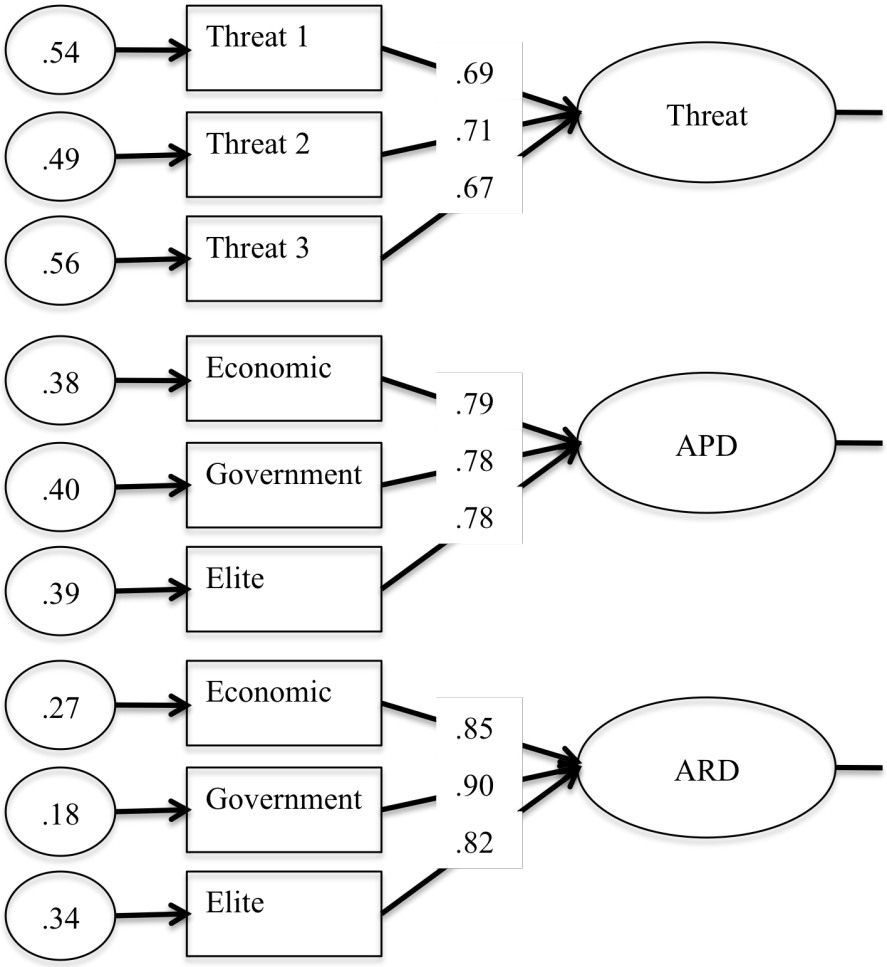


Figure 3b. Mediators in the final full measurement model

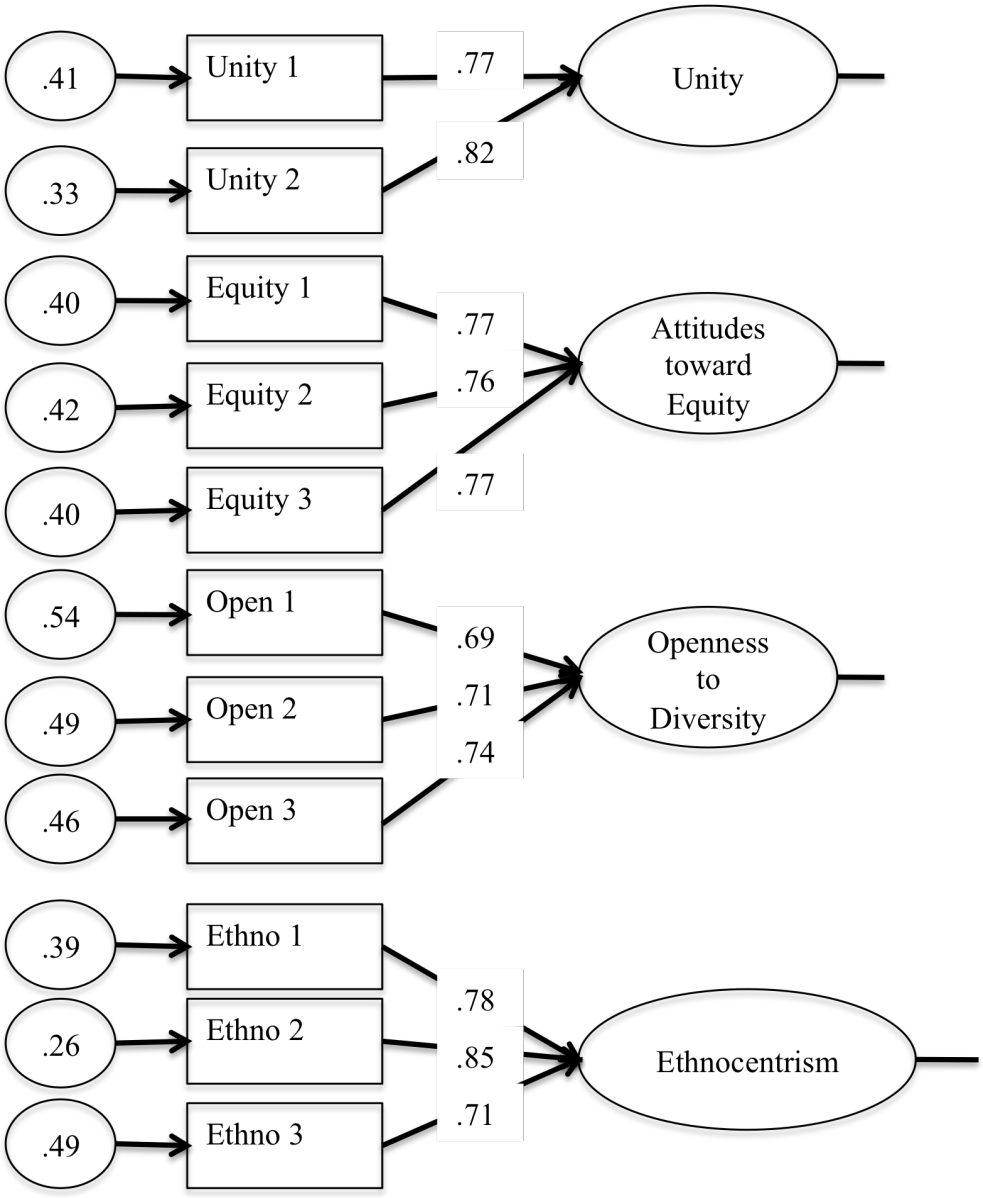


Figure 3c. Outcomes in the final full measurement model

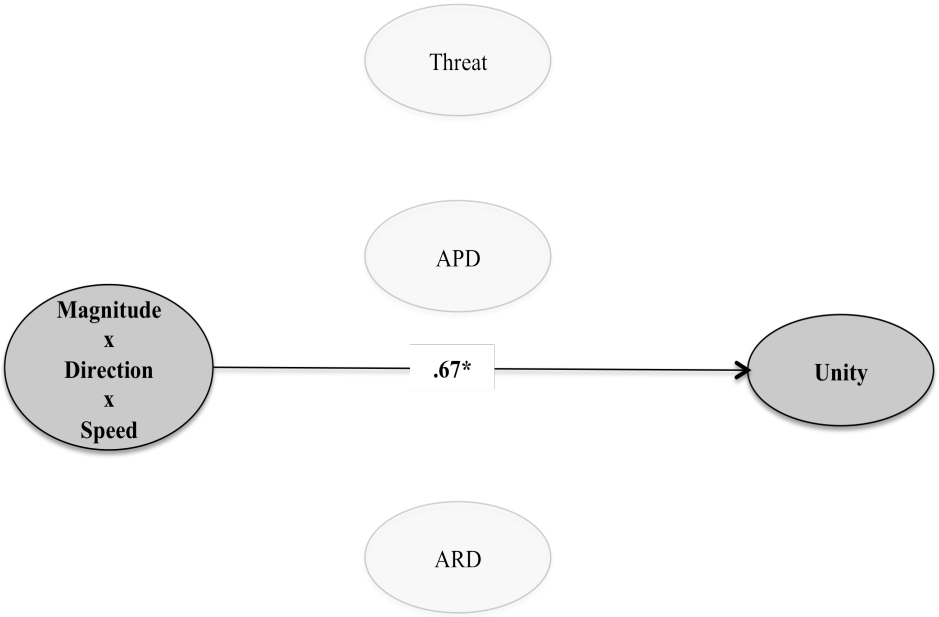


Figure 4a. Three-way interaction predicting unity in a nonmediated model

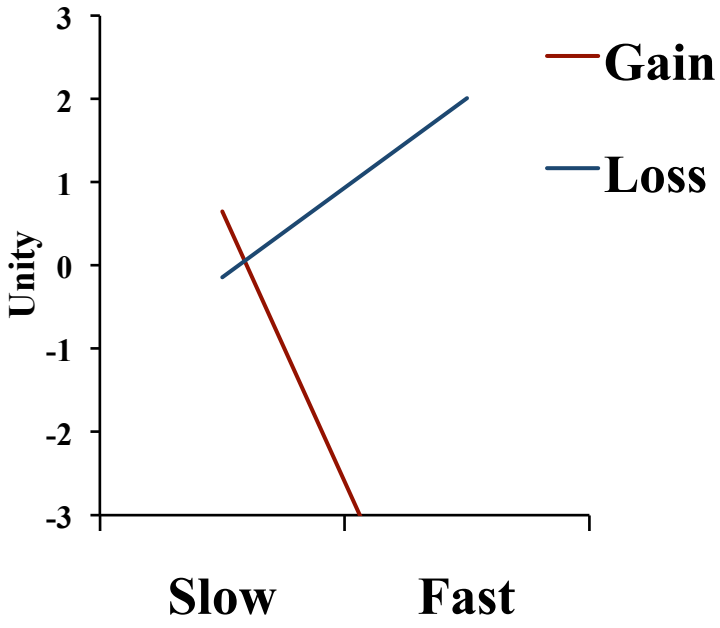


Figure 4b. Nonmediated model:Magnitude x Direction x Speed interaction predicting unity among those who perceived *small* status change

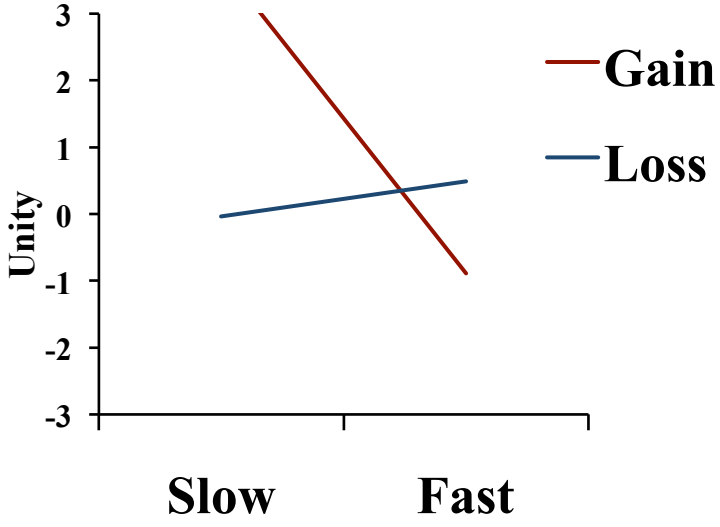


Figure 4c. Nonmediated model: Magnitude x Direction x Speed interaction predicting unity among those who perceived *large* status change.

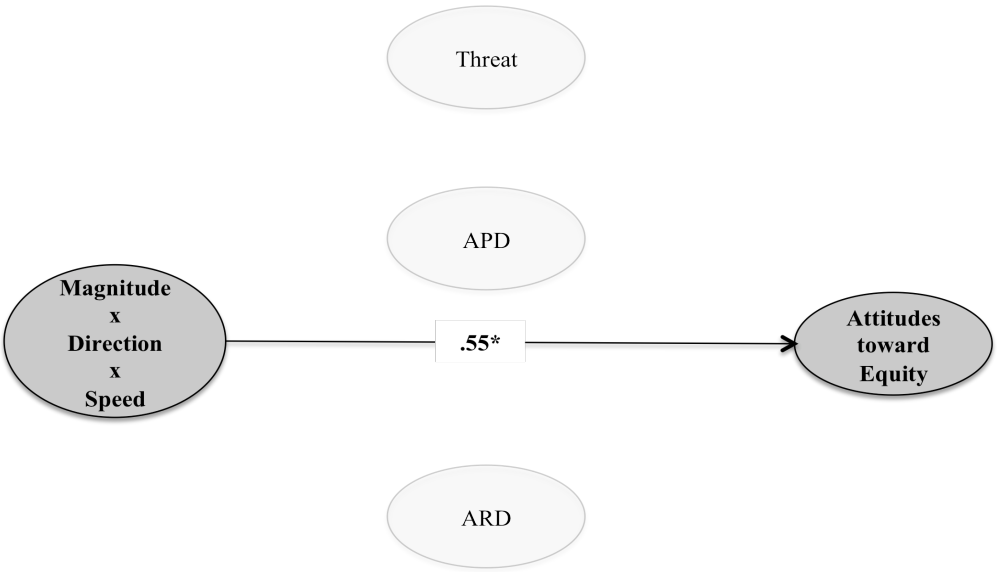


Figure 5a. Three-way interaction predicting attitudes toward equity in a nonmediated model

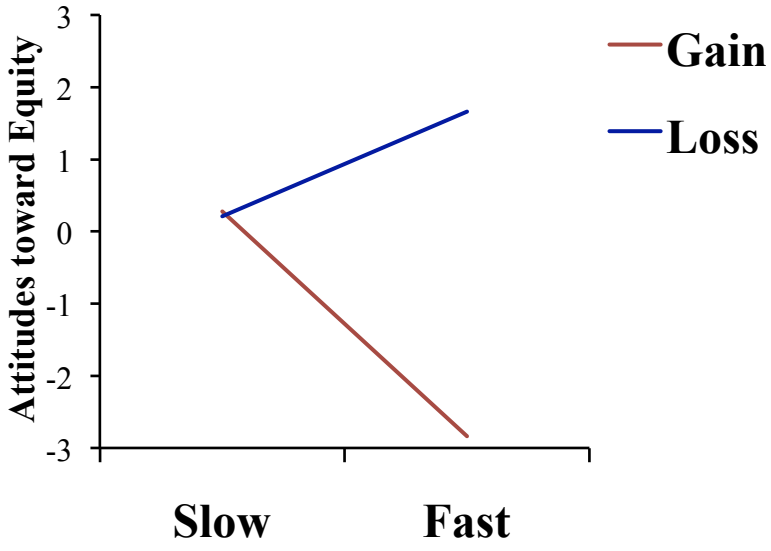


Figure 5b. Nonmediated model: Magnitude x Direction x Speed interaction predicting attitudes toward equity among those who perceived *small* status change

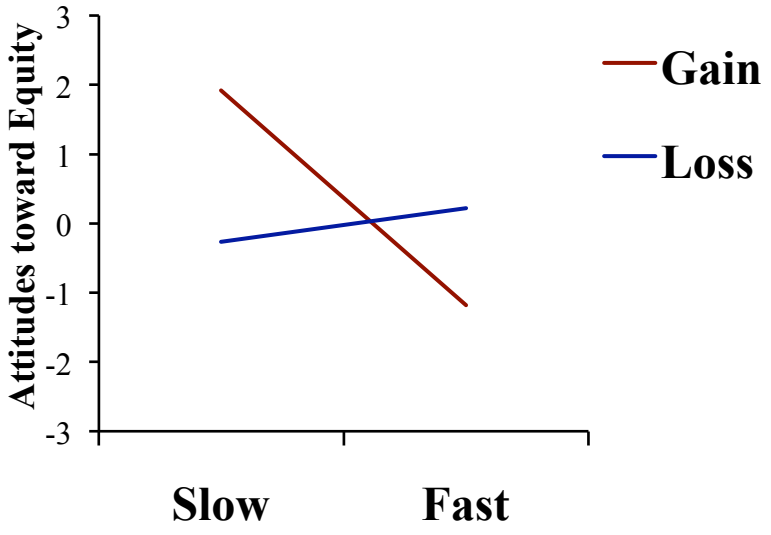


Figure 5c. Nonmediated model: Magnitude x Direction x Speed interaction predicting attitudes toward equity among those who perceived *large* status change

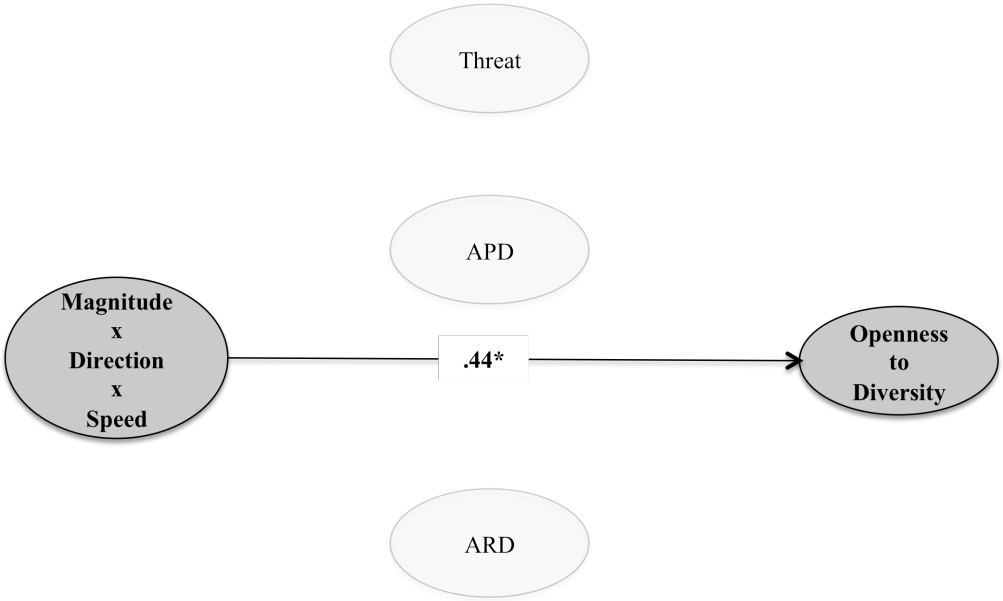


Figure 6a. Three-way interaction predicting openness to diversity in a nonmediated model

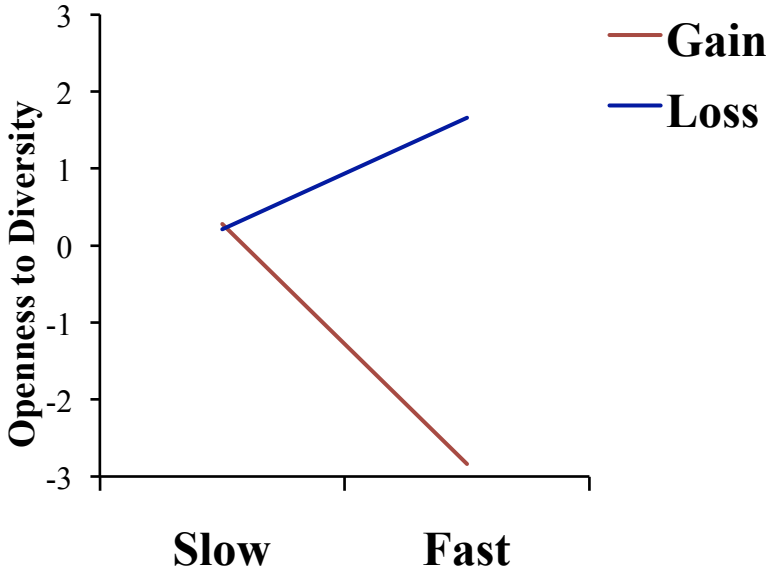


Figure 6b. Nonmediated model: Magnitude x Direction x Speed interaction predicting openness to diversity among those who perceived *small* status change

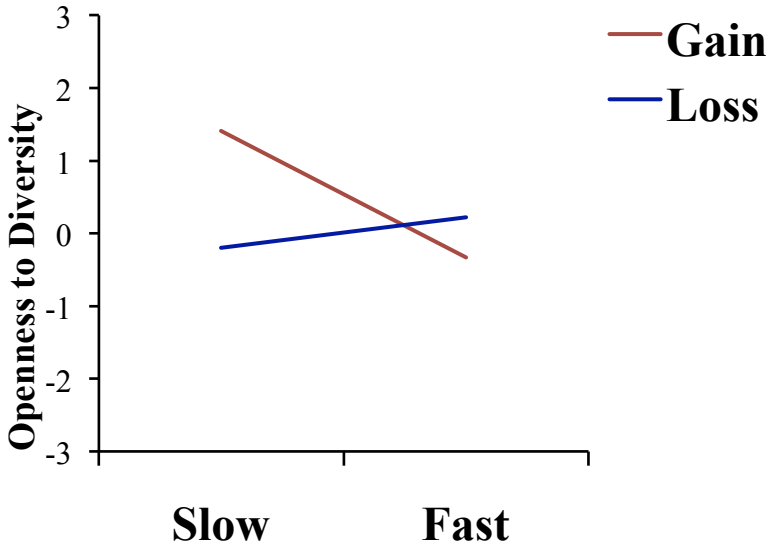


Figure 6c. Nonmediated model: Magnitude x Direction x Speed interaction predicting openness to diversity among those who perceived *large* status change

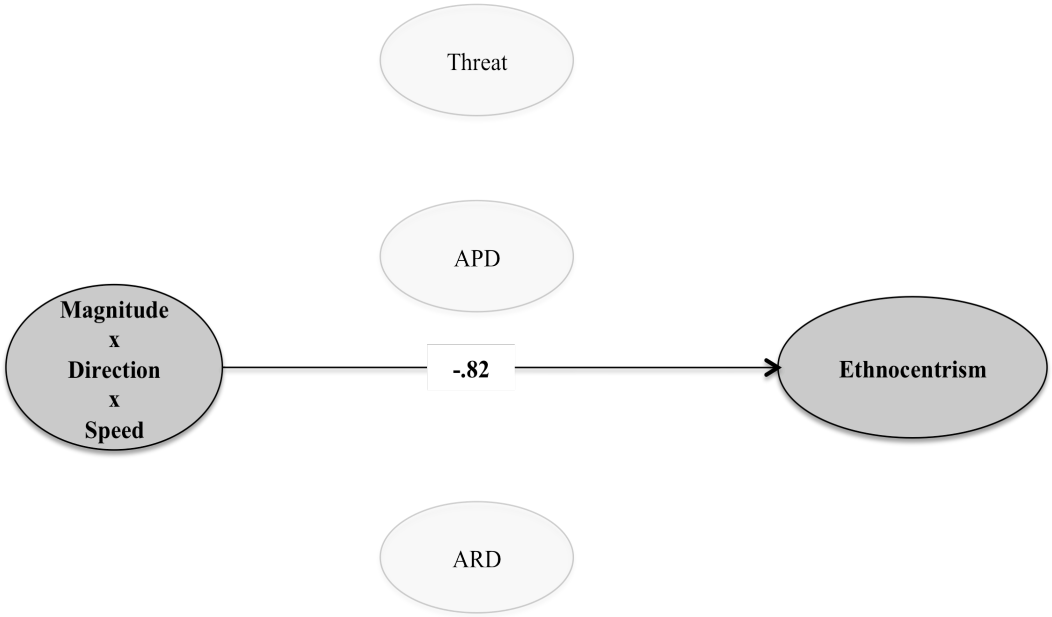


Figure 7a. Three-way interaction predicting ethnocentrism in a nonmediated model

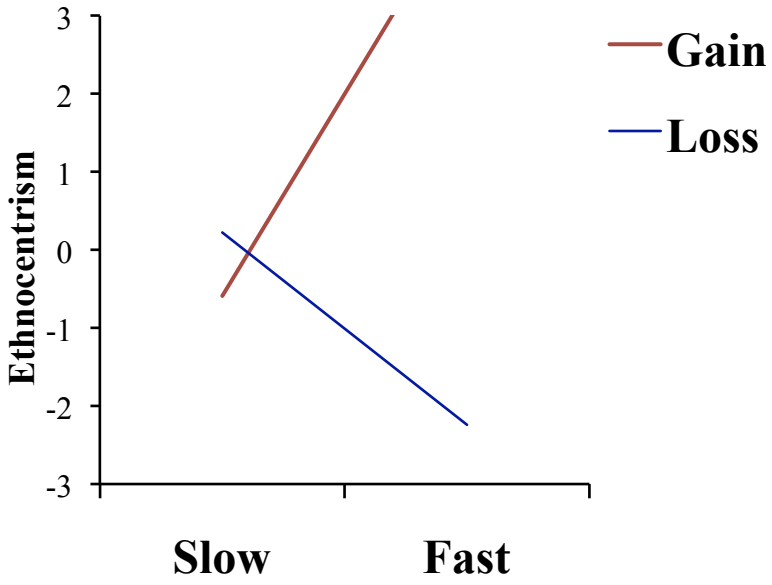


Figure 7b. Nonmediated model: Magnitude x Direction x Speed interaction predicting ethnocentrism among those who perceived *small* status change

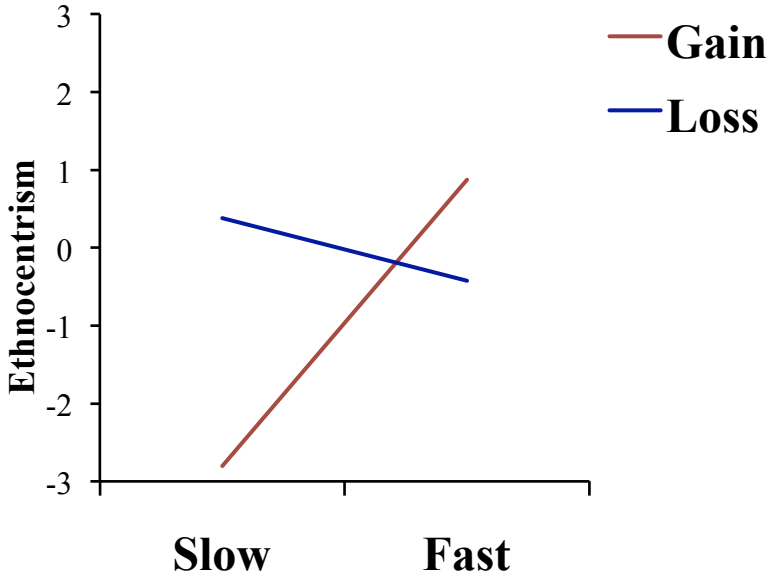


Figure 7c. Nonmediated model: Magnitude x Direction x Speed interaction predicting ethnocentrism among those who perceived *large* status change

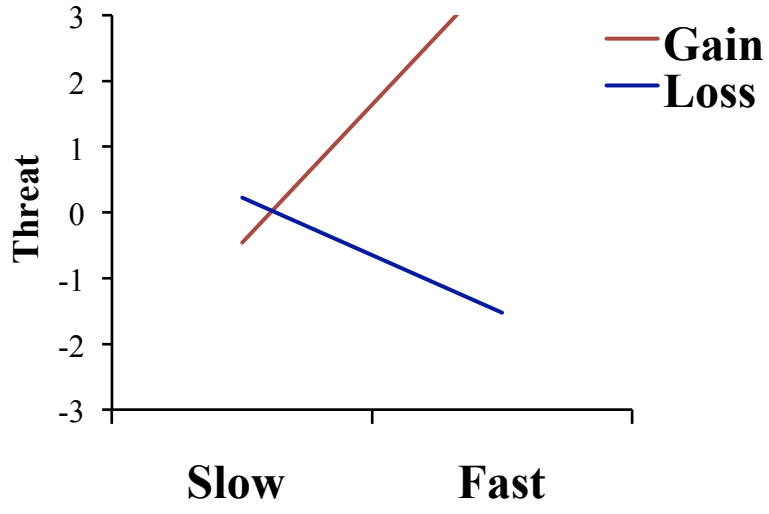


Figure 8a. Mediated model: Magnitude x Direction x Speed interaction predicting threat among those who perceived *small* status change

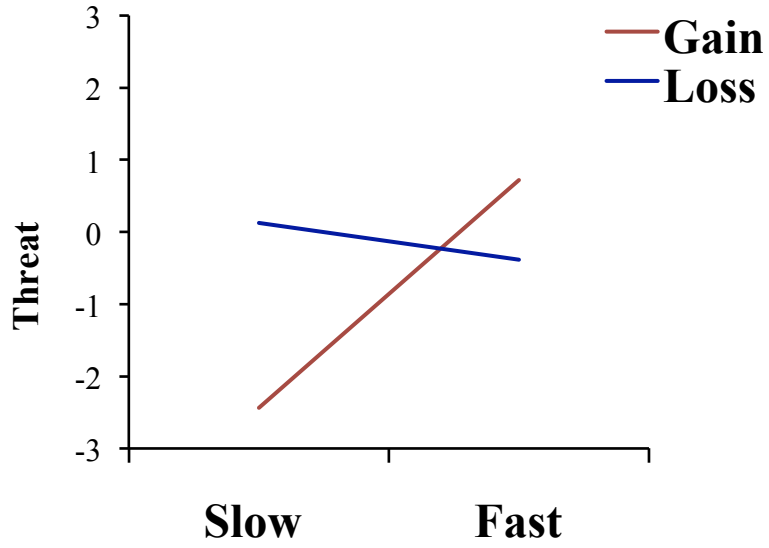


Figure 8b. Mediated model: Magnitude x Direction x Speed interaction predicting threat among those who perceived *large* status change

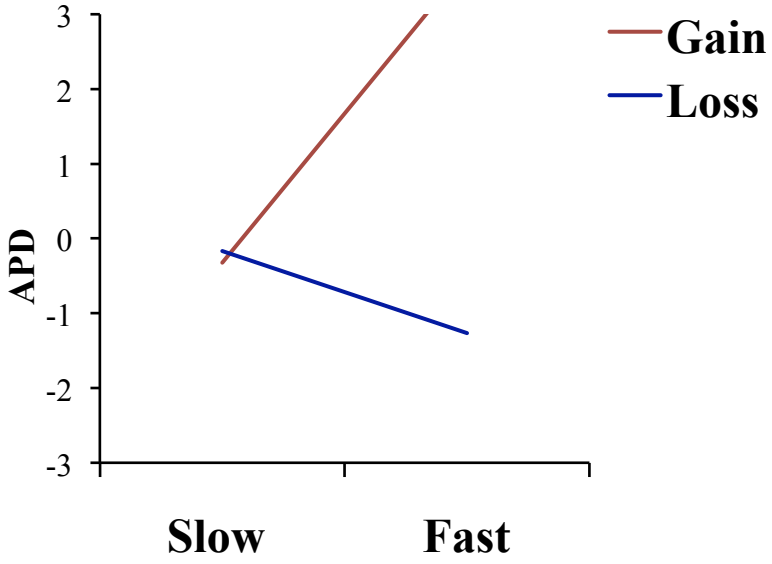


Figure 9a. Mediated model: Magnitude x Direction x Speed interaction predicting APD among those who perceived *small* status change

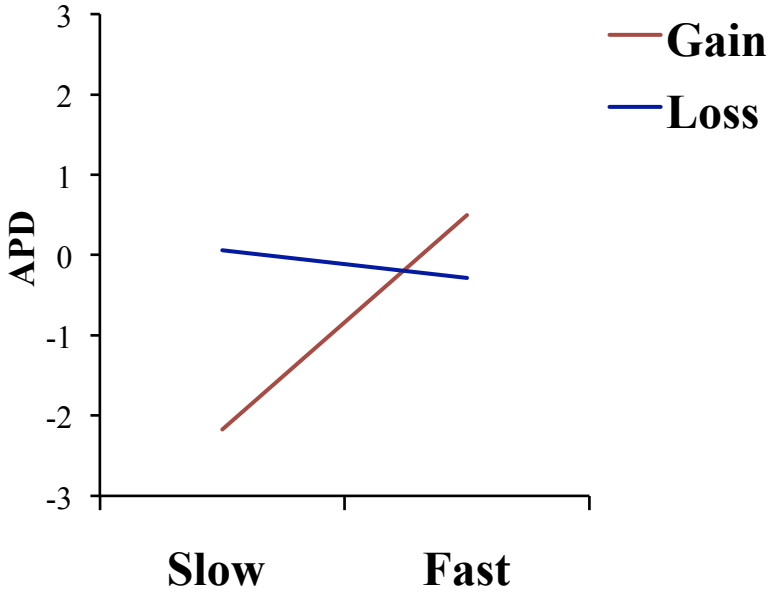


Figure 9b. Mediated model: Magnitude x Direction x Speed interaction predicting APD among those who perceived *large* status change

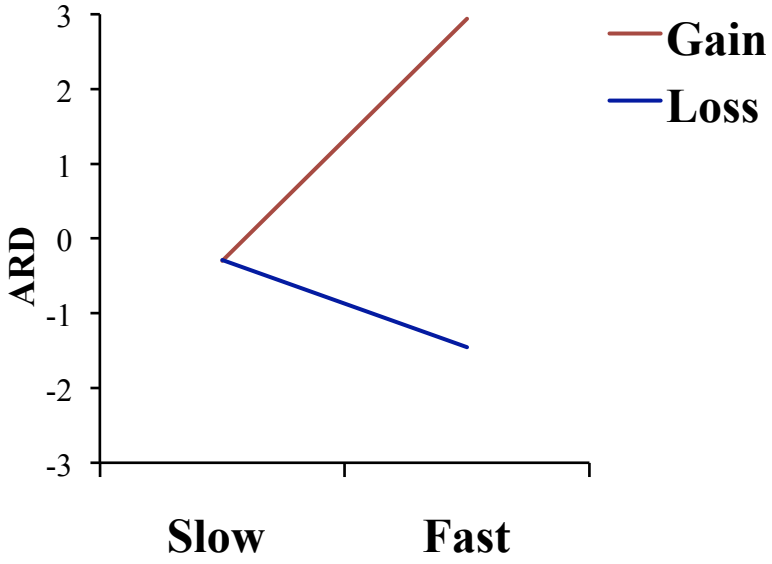


Figure 10a. Mediated model: Magnitude x Direction x Speed interaction predicting ARD among those who perceived *small* status change

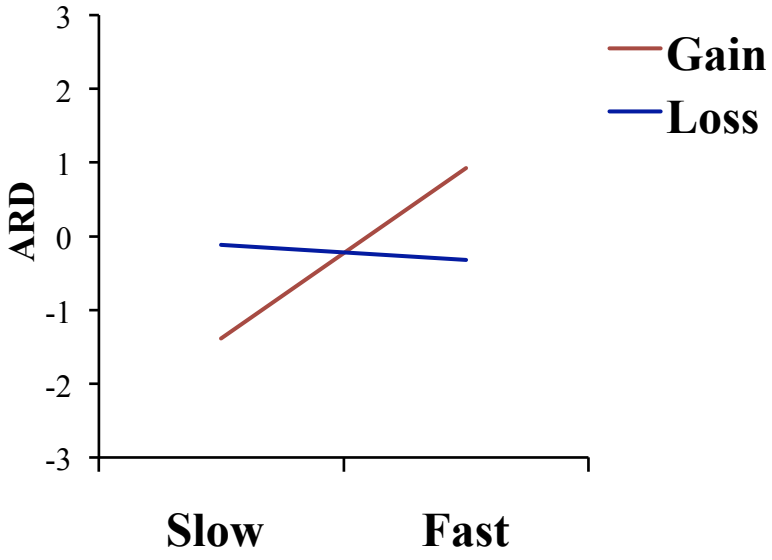


Figure 10b. Mediated model: Magnitude x Direction x Speed interaction predicting ARD among those who perceived *large* status change

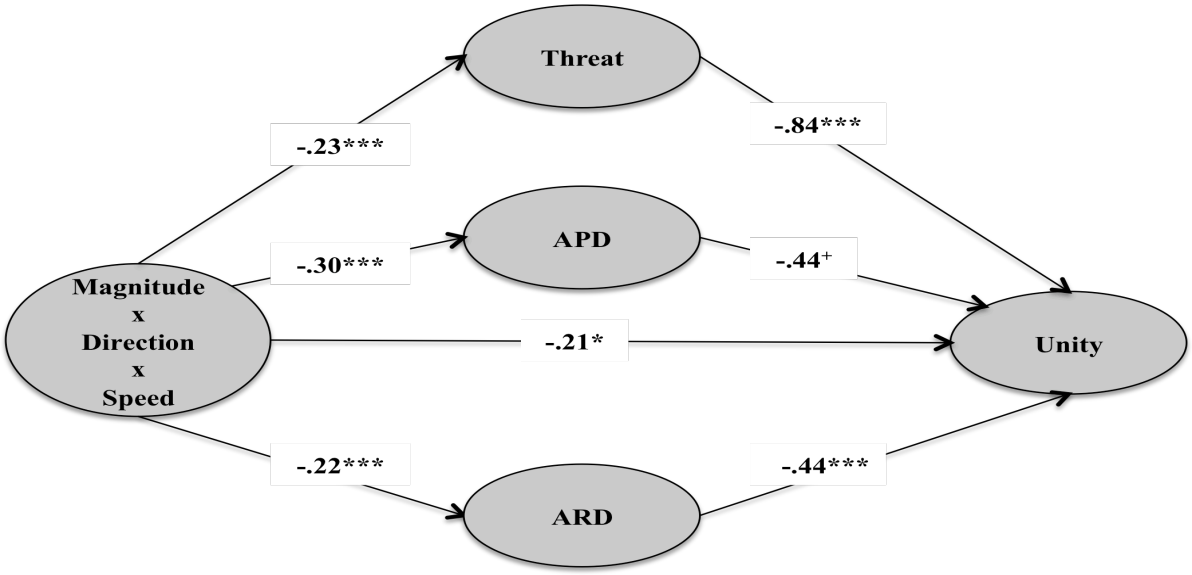


Figure 11a. Three-way interaction predicting unity in a mediated model

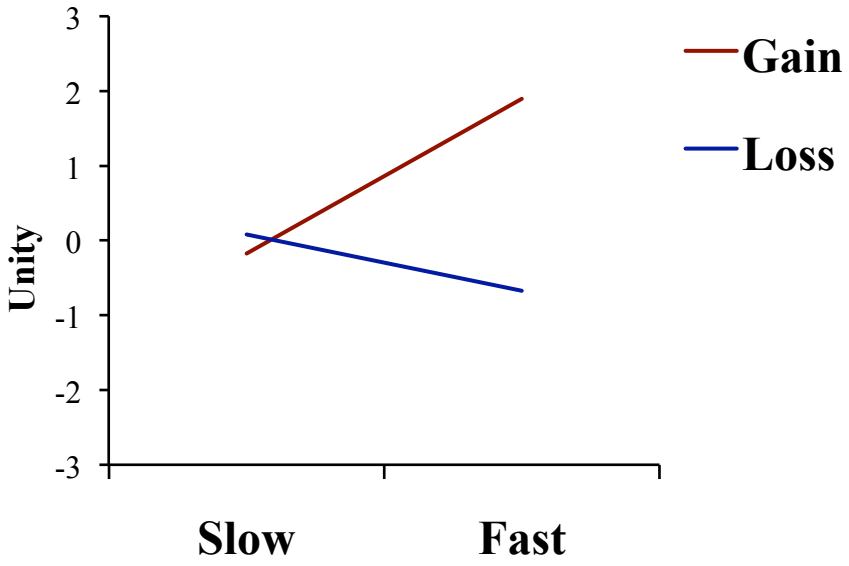


Figure 11b. Mediated model: Magnitude x Direction x Speed interaction predicting unity among those who perceived *small* status change

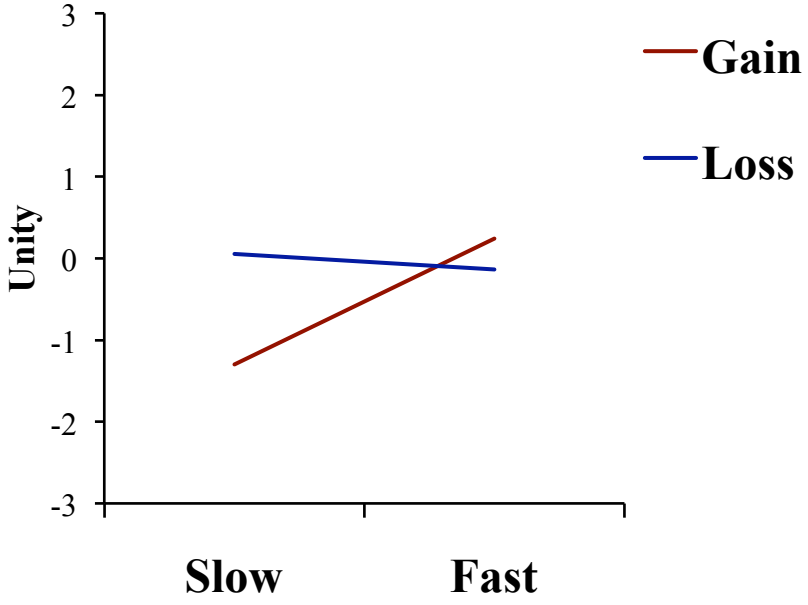


Figure 11c. Mediated model: Magnitude x Direction x Speed interaction predicting unity among those who perceived *large* status change

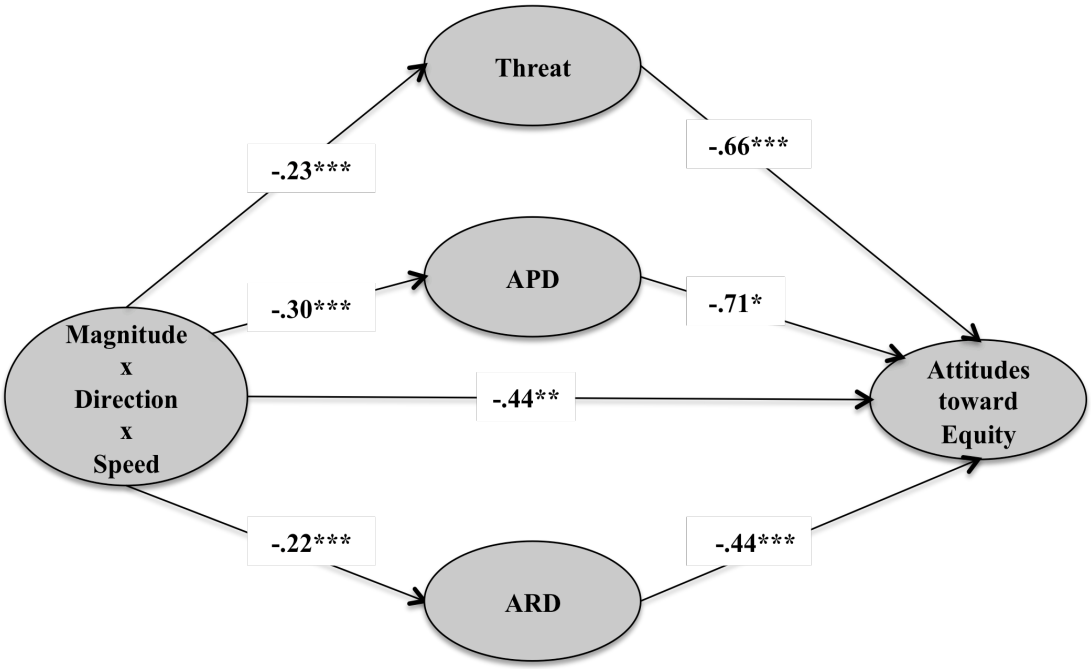


Figure 12a. Three-way interaction predicting attitudes toward equity in a mediated model

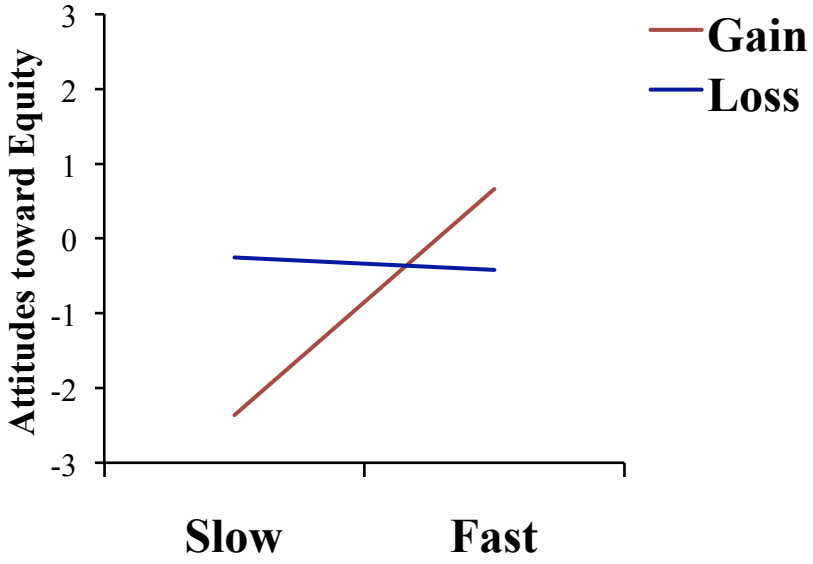


Figure 12b. Mediated model: Magnitude x Direction x Speed interaction predicting attitudes toward equity among those who perceived *small* status change

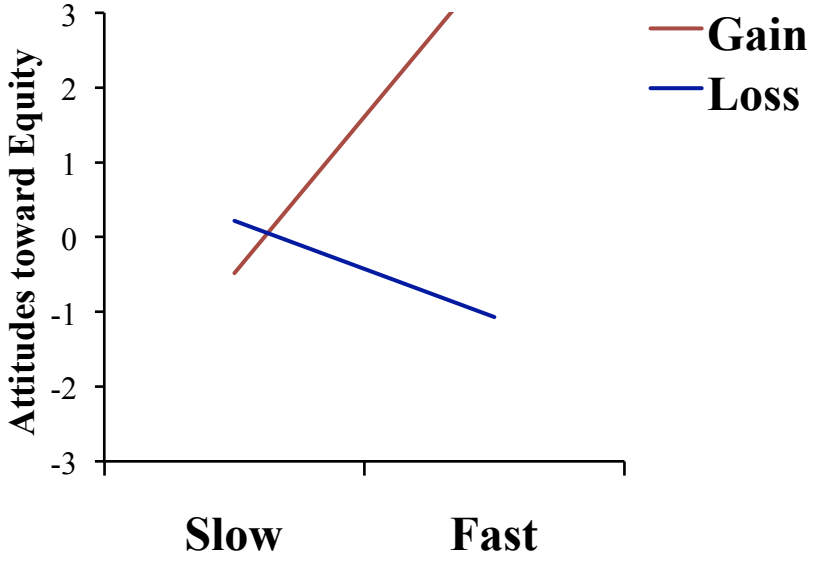


Figure 12c. Mediated model: Magnitude x Direction x Speed interaction predicting attitudes toward equity among those who perceived *large* status change

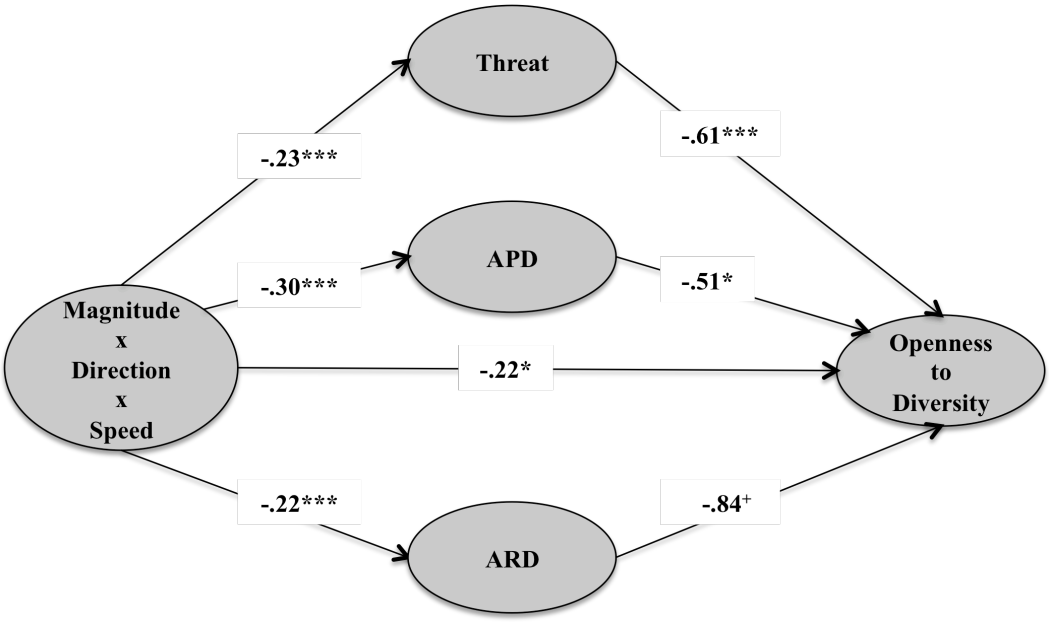


Figure 13a. Three-way interaction predicting openness to diversity in a mediated model

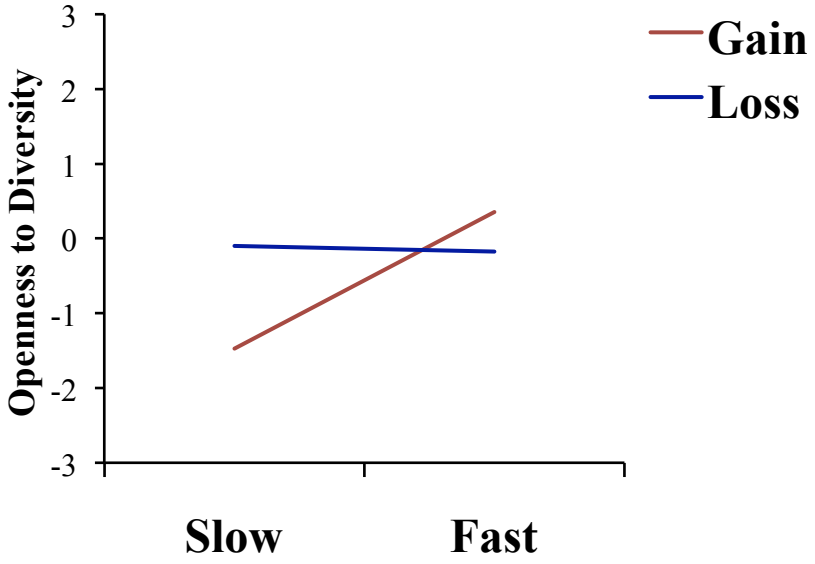


Figure 13b. Mediated model: Magnitude x Direction x Speed interaction predicting openness to diversity among those who perceived *small* status change

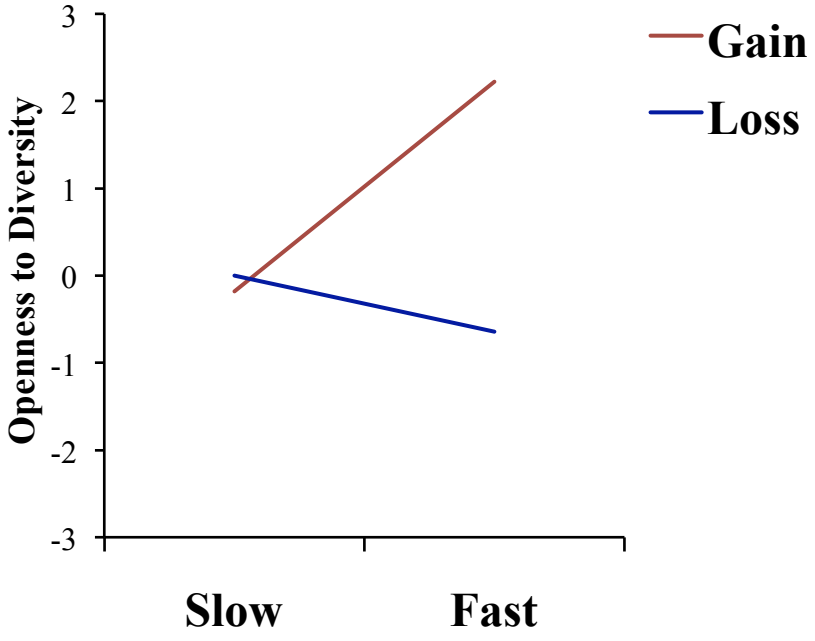


Figure 13c. Mediated model: Magnitude x Direction x Speed interaction predicting openness to diversity among those who perceived *small* status change

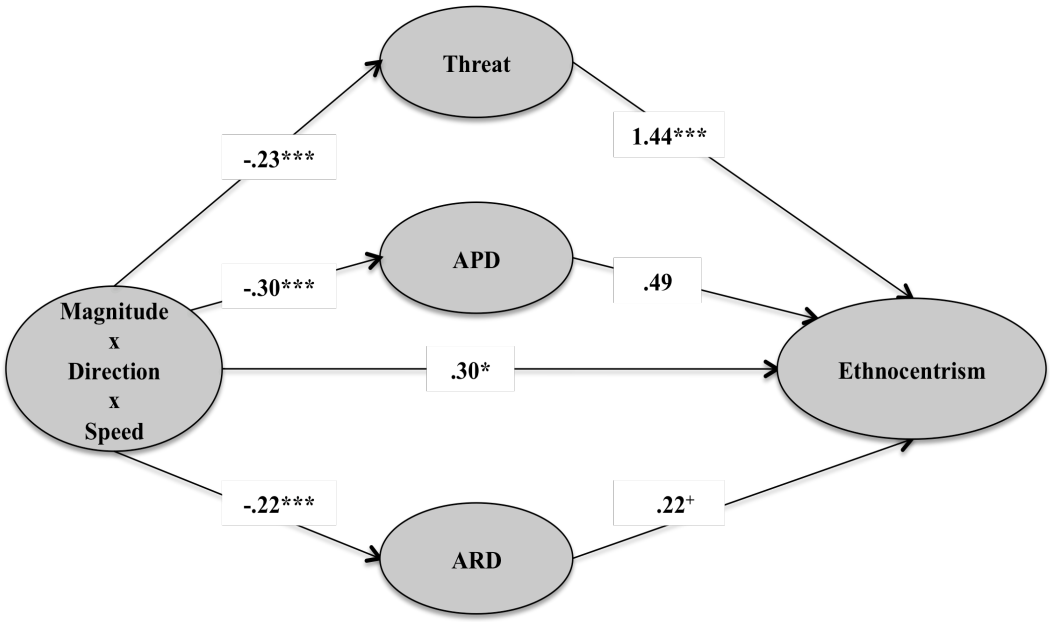


Figure 14a. Three-way interaction predicting ethnocentrism in a mediated model

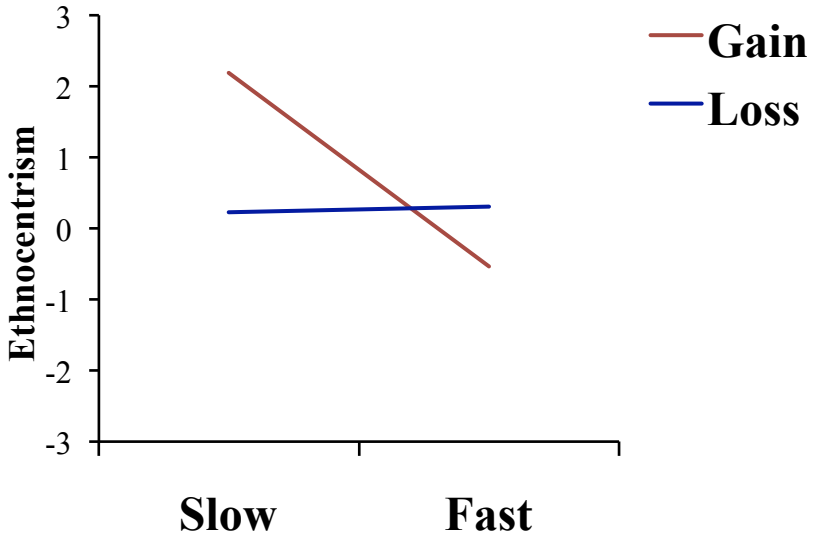


Figure 14b. Mediated model: Magnitude x Direction x Speed interaction predicting ethnocentrism among those who perceived *small* status change

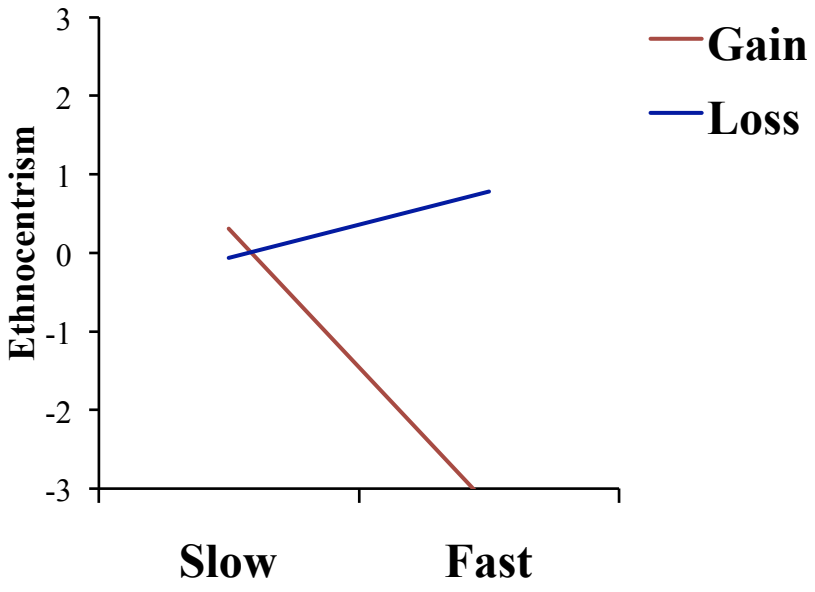


Figure 14c. Mediated model: Magnitude x Direction x Speed interaction predicting ethnocentrism among those who perceived *small* status change

NOTES

[1] Note that participants were asked to give their *subjective* perceptions of the *objective* reality.

[2] Indeed, when threat was included simultaneously with the status dimensions into the regression model for unity, the previously significant relationships between the status dimensions and their interaction with unity were no longer significant (Direction: $B = -.20$, $SE = .18$, $t\ (122) = -1.12$, $p > .05$; Direction x Speed: $B = -.17$, $SE = .21$, $t\ (122) = -.81$, $p > .05$; Magnitude x Direction x Speed: $B = -.07$, $SE = .24$, $t\ (122) = -.30$, $p > .05$), while threat remained a significant predictor ($B = -.85$, $SE = .12$), $t\ (122) = -7.23$, $p \leq .001$. Moreover, a marginally significant main effect of Magnitude has emerged ($B = -.48$, $SE = .27$), $t\ (122) = -1.80$, $p = .07$: greater magnitude of change was associated with less unity. The consequent Sobel test (Sobel, 1982) confirmed that the link between the three-way interaction and unity was mediated by the perceptions of threat ($z = 2.54$, $p \leq .01$).

[3] While ideally I would test group status as a moderator for the relationships between the dimensions of status change and intergroup outcomes by conducting multigroup structural equations analyses, doing so would significantly reduce the sample size and, thereby, the power necessary to estimate multiple paths involved in this study (e.g., McCallum, Browne, & Sugawara, 1996). Thus, for the purposes of this study, group status will be treated as a control variable, and included as an additional predictor, along with the dimensions of status change. However, future research should investigate whether the relationships between the dimensions of status change and intergroup outcomes change as a function of the groups' current status positions.

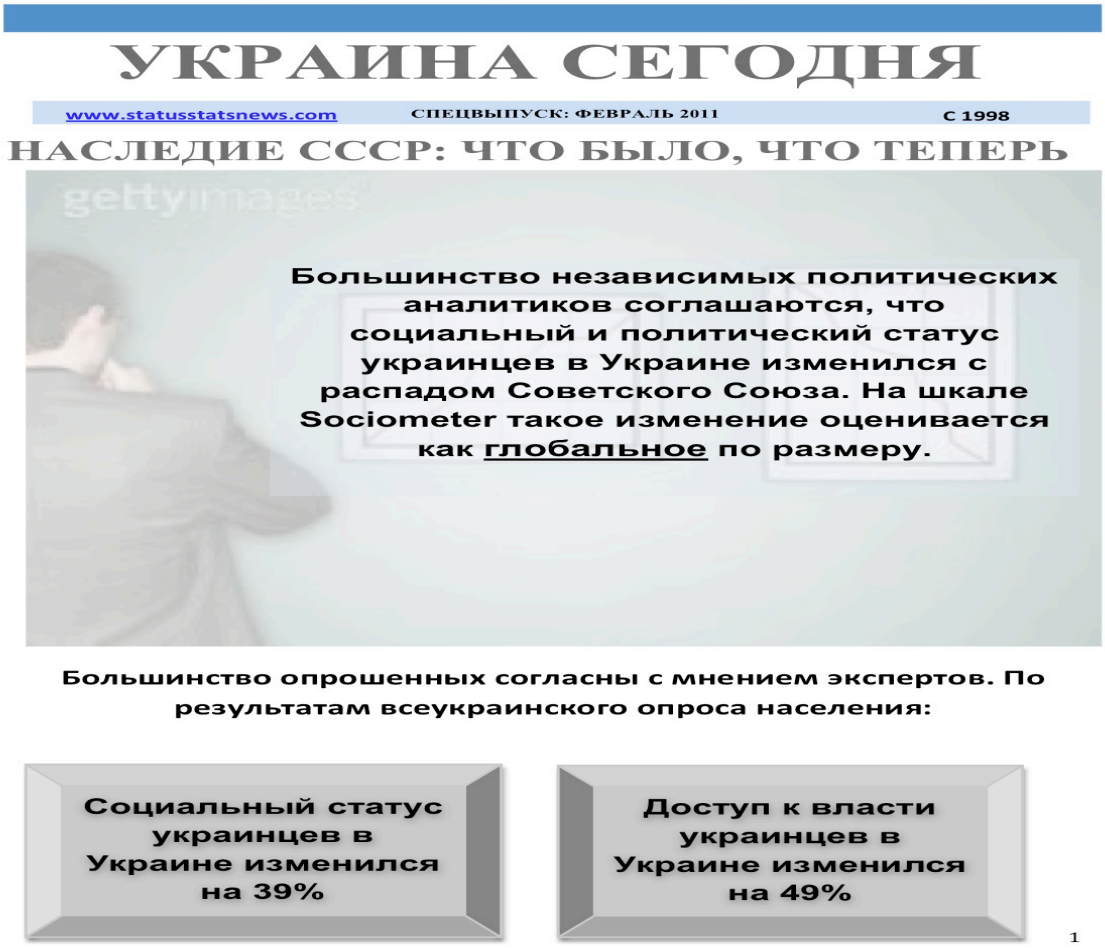
[4] Some researchers believe that because interactions and quadratics are mathematical concepts rather than mental constructs (e.g., they have indicators that are not observed variables because products of observed variables cannot be observed), interactions and quadratics are inappropriate for theoretical models, especially structural equation models (cf. Ping, 2003a). However, many others assert that failure to consider interactions may result in overlooking important findings, as well as to incorrect interpretations of research outcomes (e.g., Aiken & West 1991; Blalock, 1965; Cohen 1968; Cohen & Cohen 1975, 1983; Darlington, 1990; Friedrich, 1982; Kenny, 1985; Howard, 1989; Jaccard, Turrisi, & Wan 1990; Neter, Wasserman, & Kunter 1989; Pedhazur, 1982).

[5] Cultural and historical factors may affect the link between status change and intergroup relations, and future research on societal transformation should consider context in both theoretical and empirical analyses. Contexts, in which status change occurs, may differ in their structural, historical, and socio-cultural dimensions (e.g., Moghaddam & Lvina, 2002). For instance, shifts within the societal hierarchy may or may not be accompanied by broader changes within the society, e.g., changes in governing structures and political ideology. Contexts may also vary in the history of relationships between groups: whether there is a tradition of cooperation and peaceful

coexistence, or whether the previous hierarchical structure was imposed by a third party (e.g., Belgium in the Rwandan context), or was a result of internal processes. Further, contexts may differ in how similar or distant groups are in their religious beliefs, language, ethnicity, and cultural heritage; all these are factors, which may play a significant role in defining the dynamics between status shifts and intergroup relations.

APPENDIX A

MANIPULATION OF MAGNITUDE OF STATUS CHANGE IN STUDY 1



1

Translation

Titles. Ukraine Today; Special Report, February 2011; Produced since 1998

Legacy of the USSR: What Was Then and What Is Now.

Main textbox. Majority of independent political analysts agree that the sociopolitical status of ethnic Ukrainians in Ukraine has changed with the disintegration of the Soviet Union. The world renown Sociometer scale evaluates this change as large in its scope.

Under the main textbox. Majority of those polled agreed with the experts' opinion. According to the results of all-Ukrainian survey, Ukrainians feel that the socioeconomic status of the ethnic Ukrainians in Ukraine has changed by 39 percent; Ukrainians' access to political power has changed by 49 percent.

APPENDIX B

ITEMS USED IN STUDY 1

Manipulation Check

1. According to the flyer that you just read, how much did the status of the ethnic Ukrainians has changed with the disintegration of the Soviet Union?

0 1 2 3 4 5 6
Did not change at all — Changed drastically

Direction of Status Change

2. In your view, what was the nature of the status change of ethnic Ukrainians?

−3 −2 −1 0 +1 +2 +3
Severe decline — Significant improvement

   a) Economic status

   b) Social status

   c) Political power

Speed of Status Change

3. How fast did this change happen?

0 1 2 3 4 5 6
Very slowly — Very fast

   a) Economic status

   b) Social status

   c) Political power

The scale below was used to respond to the following items:

−3 −2 −1 0 +1 +2 +3
Strongly disagree — Strongly agree

Unity

4. It doesn't matter, Russian or Ukrainian – we are all citizens of one country.
5. Russians and Ukrainians are ultimately one people.

Threat

6. Most politicians cater too much attention to the needs of ethnic Russians and ignore the needs of ethnic Ukrainians.
7. Russians do not appreciate how much Ukrainians have done for them.
8. Russians and Ukrainians will never feel comfortable with each other.
9. Russians are not true patriots of Ukraine.
10. Russians prevent Ukrainians from enjoying full political power in their own country.
11. Russians had too much power in the Soviet times.

Attitudes toward Equity

12. All those who live in Ukraine should have equal rights.
13. As the main ethnic group in Ukraine, Ukrainians should have privileges in most areas (reverse-coded).
14. Immigrants living in Ukraine should possess equal rights.

Openness to Diversity

15. I am interested in the traditions and values of other cultures in Ukraine.
16. I seek opportunities to interact with people from a different cultural background than mine.
17. I respect traditions and customs of other ethnic groups in Ukraine.

Ethnocentrism

18. I am only comfortable around people of my own ethnicity.
19. I would not mind if a person of a different ethnicity became a member of my family (reverse-coded).
20. I would not mind if a competent person of a different ethnicity became my boss (reverse-coded).

APPENDIX C

ITEMS USED IN STUDY 2

Magnitude of Status Change

1. In your view, how much did the status of ethnic Ukrainians [Russians] has changed with the disintegration of the Soviet Union?

0 1 2 3 4 5 6
Did not change at all — Changed drastically

a) Economic status

b) Social status

c) Political power

Direction of Status Change

2. In your view, what was the nature of the status change of ethnic Ukrainians [Russians]?

−3 −2 −1 0 +1 +2 +3
Severe decline — Significant improvement

a) Economic status

b) Social status

c) Political power

Speed of Status Change

3. How fast did this change happen?

0 1 2 3 4 5 6
Very slowly — Very fast

a) Economic status

b) Social status

c) Political power

The scale below was used to respond to the following items.

−3▣▣▣▣▣▣▣▣−2▣▣▣▣▣▣−1▣▣▣▣▣0▣▣▣▣▣+1▣▣▣▣▣▣+2▣▣▣▣▣▣▣▣+3

Strongly disagree Strongly agree

Unity

4. It doesn't matter, Russian or Ukrainian – we are all citizens of one country.

5. Russians and Ukrainians are ultimately one people.

Attitudes toward Equity

6. All those who live in Ukraine should have equal rights.

7. As the main ethnic group in Ukraine, Ukrainians should have privileges in most areas (reverse-coded).

8. Immigrants living in Ukraine should possess equal rights.

Openness to Diversity

9. I am interested in the traditions and values of other cultures in Ukraine.

10. I seek opportunities to interact with people from a different cultural background than mine.

11. I respect traditions and customs of other ethnic groups in Ukraine.

Ethnocentrism

12. I am only comfortable around people of my own ethnicity.

13. I would not mind if a person of a different ethnicity became a member of my family (reverse-coded).

14. I would not mind if a competent person of a different ethnicity became my boss (reverse-coded).

Threat

15. Most politicians cater too much attention to the needs of ethnic Russians [Ukrainians] and ignore the needs of ethnic Ukrainians. (*Threat 1*)

16. Russians [Ukrainians] do not appreciate how much Ukrainians [Russians] have done for them. (*Threat 2*)

17. Russians and Ukrainians will never feel comfortable with each other. (*Threat 3*)

Present-Day Relative Deprivation

Cognitive component (the scoring for each question was reverse-coded prior to the analyses)

18. In comparison to [Russians/Ukrainians], how would you evaluate today's situation of [Ukrainians/Russians] in terms of__?

−3▣▣▣▣▣▣▣▣−2▣▣▣▣▣▣−1▣▣▣▣▣0▣▣▣▣▣+1▣▣▣▣▣▣+2▣▣▣▣▣▣▣▣+3
Much worse Much better

a) **Economic resources** b) Social esteem c) Political power d) Access to quality healthcare

e) Access to quality education f) **Treatment by the government** g) **Presence among the elite**

Affective component (APD)

19. When you think about this comparison, how angry do you feel?

20. When you think about this comparison, how outraged do you feel?

▣▣▣▣0▣▣▣▣▣1▣▣▣▣▣▣2▣▣▣▣▣▣3▣▣▣▣▣▣4▣▣▣▣▣▣5▣▣▣▣▣▣6▣▣▣▣
Not at all Very Much

Retrospective Relative Deprivation

Cognitive component (the scoring for each question was reverse-coded prior to the analyses)

18. <u>During Soviet times,</u> in comparison to [Russians/Ukrainians], how would you evaluate the situation of [Ukrainians/Russians] in terms of__?

−3▣▣▣▣▣▣▣▣−2▣▣▣▣▣▣−1▣▣▣▣0▣▣▣▣+1▣▣▣▣▣▣+2▣▣▣▣▣▣▣▣+3
Much worse Much better

a) Economic resources b) Social esteem c) Political power d) Access to quality healthcare

e) Access to quality education **f) Treatment by the government g) Presence among the elite**

Affective component (ARD)

19. When you think about this comparison, how angry do you feel?

20. When you think about this comparison, how outraged do you feel?

▣▣▣▣0▣▣▣▣▣1▣▣▣▣▣2▣▣▣▣▣3▣▣▣▣▣4▣▣▣▣▣5▣▣▣▣▣6▣▣▣▣
Not at all Very much

Group Status

21. What is your ethnic background? ____Russian ____Ukrainian

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